

AMERICAN HISTORY

Illustrated

September/October 1989

PHOTOGRAPHY: MIRROR OF THE PAST

**A Special Issue
Marking 150 Years
Of Photography
In America**

**50 pages of
19th century
American
photography**

\$3.50 • \$3.95 CANADIAN

THE CIVIL WAR GENERALS COLLECTION

The Video Collection For Civil War Enthusiasts

★ ROBERT E. LEE ★ ULYSSES S. GRANT ★ STONEWALL JACKSON ★

This extraordinary 3-volume video collection traces the lives of the Civil War's most colorful and brilliant military minds. Noted historians insight into the strategy and tactics highlight this collector's treasure. With an original soundtrack by Grammy Award winner Jon Carrol and through the

use of archival photographs, artwork and rare documents, a vivid portrait of each of these master Generals brilliantly comes to life. With the cooperation of Washington and Lee Universities and the Brooklyn Historical Society, these are the definitive video biographies of the men who made history.

★ ROBERT E. LEE

This compelling video chronicles the remarkable triumphs and dramatic defeats of the legendary Confederate General. You'll see it all from his Virginia boyhood home, Harper's Ferry, Arlington House as well as numerous Civil War Battlefields. Renown to be the most brilliant General of the war, his remarkable story unfolds before your eyes.

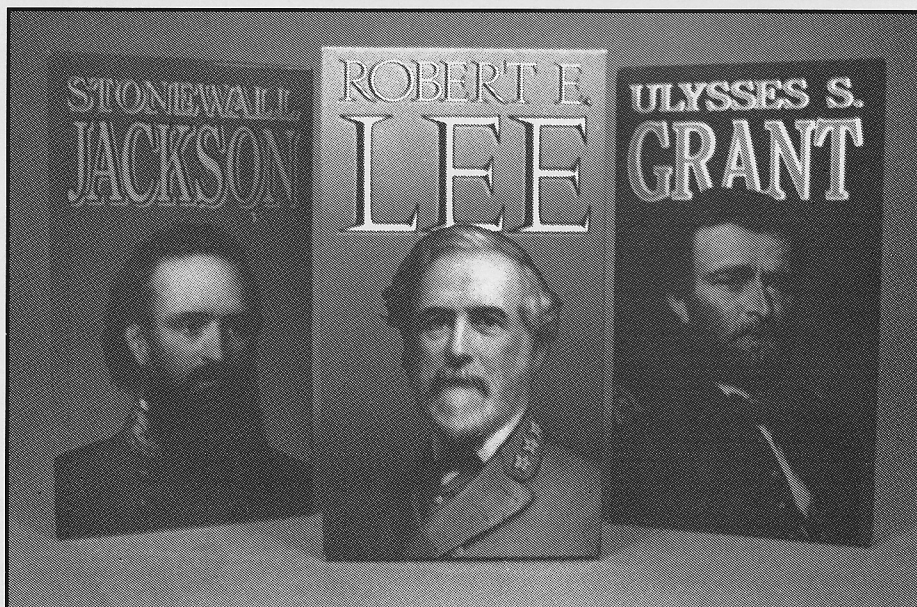
★ ULYSSES S. GRANT

Abraham Lincoln refused to dismiss Grant early in the Civil War by saying "I can't spare this man—he fights!" This hard-drinking, one-time shop clerk became the Commander of the Civil War's victorious Union armies. This video unlocks the unusual character of Grant's life.

★ THOMAS "STONEWALL" JACKSON

The exploits of one of America's most brilliant and eccentric military leaders is documented in this video that takes you to Antietam, Fredricksburg, Chancellorsville, West Point and others. Jackson's orphaned youth in the Appalachian Mountains to his death in the Civil War provides the colorful backdrop to this first ever video biography.

THE CIVIL WAR GENERALS VIDEO COLLECTION
#2933 3-Volumes 30 minutes each \$59.95



For Faster Service, Call
Our 24-Hour, Toll-Free Hotline:

1-800-338-7710, Ext. CW909

TO ORDER, please send check, money order or credit card (no cash) to:

FUSION VIDEO

17214 So. Oak Park Ave.-Dept. CW909-Tinley Park, IL 60477

ALL CASSETTES ARE VHS ONLY.

1-800-338-7710

Inside Illinois 312-532-2050

Name _____

Address _____

City _____ State _____ Zip _____

☐ YES! Please send me a Free FUSION CATALOG with my order.

☐ I am enclosing \$2.95 for a FUSION CATALOG.

CASSETTE NUMBER

#2933 THE CIVIL WAR GENERALS COLLECTION

Bill my credit card: ☐ Visa ☐ MasterCard

Account Number _____

Expiration Date _____

Authorization Signature of Cardholder _____

Video Cassette Total \$ _____

Shipping & Handling \$4.50*

TOTAL Amount \$ _____ Illinois residents add 7% sales tax.

*Canadian orders: \$8.95 for shipping & handling.
*All other Foreign countries: \$13.95 for surface mail.
Or \$23.95 air mail for shipping & handling.

FUSION VIDEO is a division of FUSION INDUSTRIES, INC. 1896



COVER

Photographic artifacts pictured in Lisa Masson's still-life include a nineteenth-century studio view camera, turn-of-the-century plate-back folding camera, early twentieth-century single-lense reflex, several stereographic viewers, and examples of daguerreotypes, ambrotypes, tintypes, cartes-de-visite, cabinet views, and other paper photographs.

PHOTOGRAPH BY LISA MASSON,
WASHINGTON, D.C.

ARTIFACTS FROM THE
COLLECTIONS OF LISA MASSON,
JAMES KEOUGH, AND ED HOLM

FEATURES

PHOTOGRAPHY: MIRROR OF THE PAST

A Special Sesquicentennial Issue

One hundred and fifty years ago, in September 1839, the first American photographers made their first images—on metal plates called daguerreotypes. This special issue of *American History Illustrated*—featuring a fifty-page portfolio beginning on page 20—focuses on the formative decades of one of mankind's most remarkable and powerful mediums for communication and self-expression.



DEPARTMENTS

Editor's Desk	4	History Bookshelf	12
Mailbox	6	Sight & Sound	16
History Today	8	American Landmarks	18
American Gallery	10		

America's First Silver Dollar

*Real legal tender of our 13
Colonies — two centuries old*



Struck in New Spain from 1772 to 1825, these magnificent silver dollars were popularly used in the 13 Colonies, and Thomas Jefferson recommended that they become official legal tender of the United States. Denominated 8 Reales, occasionally some were cut into quarter-dollar pieces (hence the expression "two bits"). The U.S. dollar sign (\$) is believed to derive from the scroll-effect pillars of the reverse. These historic coins remained legal tender in the U.S. until 1857 and were the most favored trade silver dollars in the world. They're real scarcities in the well-preserved quality we offer. Our supply bears "chopmarks" of Chinese merchants — proof of their world travel. Each silver dollar is a big 39mm in diameter, contains 27 grams of .903 silver, and comes with a Certificate of Authenticity attesting to its Fine quality and genuine status. While current supplies last, prices are as follows:

1 coin, \$75; 2 coins, \$150; 3
coins, \$215 (save \$10);
5 coins, \$345 (save \$30);
10 coins, \$675 (save \$75).

Order #7144A. Limit 10 coins per customer. 100% satisfaction guarantee: you may return your order within 30 days of receipt for a prompt no-questions-asked refund.

To order by credit card, call toll-free 1-800-451-4463 (24 hours a day, 7 days a week). Or send a check or money order to: International Coins & Currency, Inc., 11 E. State St., Box 218, Dept. 1043, Montpelier, Vermont 05602. Shipped postpaid. Special presentation cases for individual coins are also available at \$2.50 each.

EDITOR'S DESK



Photography is a medium with many uses, but perhaps its most significant role in our society has been as a chronicler of people and events. During photography's 150 years of existence, cameras have compiled a visual record (admittedly a fragmentary one) documenting more than two-thirds of our nation's history. The impact of that pictorial archive on our perception of the past is almost beyond calculation.

I find the photograph above (a mid-nineteenth-century daguerreotype by Boston photographers Albert Sands Southworth and Josiah Johnson Hawes) an illustration in point, symbolizing the gulf that separates the era documented by photography from that pictured only by the artist's pencil and brush. The identity of the young woman in the picture is lost to us, but through the miracle of photography she projects an unquestionable *reality* to the viewer. In the case of George Wash-

ington, however, that sense of humanity is denied us. Our perception of the first president and his generation—despite the genius of Gilbert Stuart and other artists—is a *mythic* view.

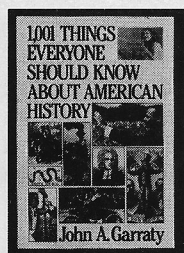
Through photography, for example, we can look with our own eyes into the haunted eyes of Civil War general Ulysses S. Grant (page 43), and we can see for ourselves the real price paid by those who fought in that conflict (page 48). Imagine how much deeper our understanding and appreciation of the founding fathers could be if photographers had been present at Concord Bridge and Bunker Hill in 1775, and if camera lenses had recorded the faces of such men and women as Thomas Jefferson, George and Martha Washington, and Ben Franklin!

Ed Holm

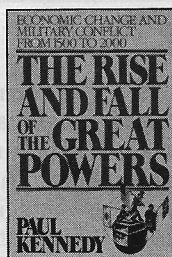
TAKE ANY 3 FOR \$1 EACH

Plus a 4th at the low Member's price.

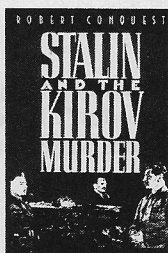
NO RISK, NO COMMITMENT.



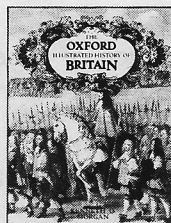
1057. \$19.95/\$17.50



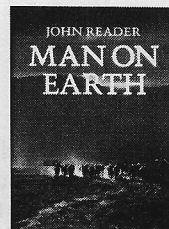
1644. \$24.95/\$17.50



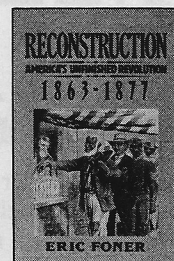
1198. \$16.95/\$14.95



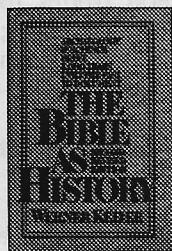
1594. \$39.95/\$18.50



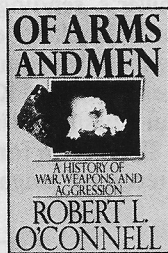
1677. \$29.95/\$22.95



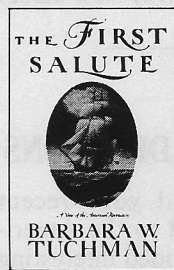
6767. \$29.95/\$18.95



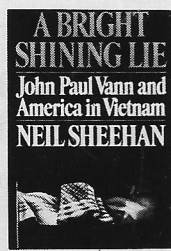
3012. \$14.95/\$10.95



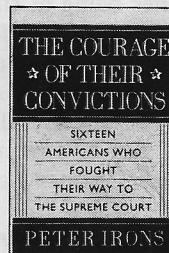
1578. \$24.95/\$18.95



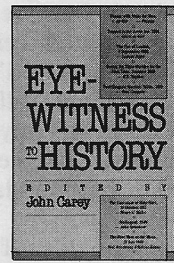
6080. \$22.95/\$17.50



1495. \$24.95/\$18.50



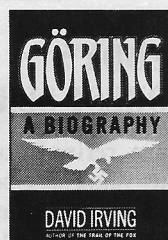
2568. \$22.95/\$17.95



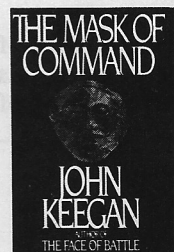
6007. \$24.95/\$17.95



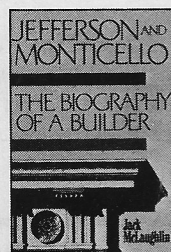
7526. \$17.95/\$15.50



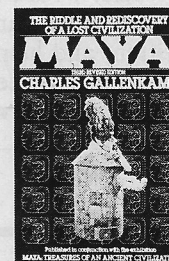
8615. \$22.95/\$19.50



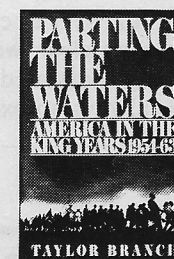
4473. \$18.95/\$15.50



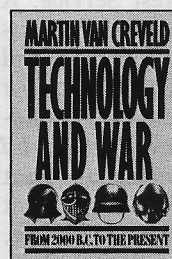
1503. \$29.95/\$19.95



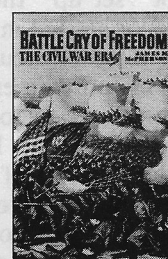
2535. \$22.95/\$16.95



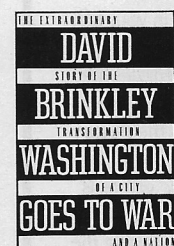
1081. \$24.95/\$18.95



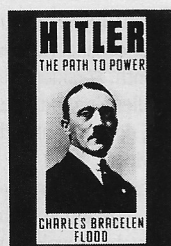
1024. \$22.95/\$17.95



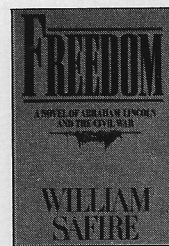
3988. \$35/\$22.50



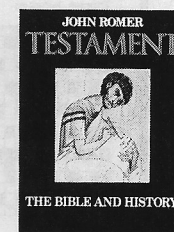
6130. \$18.95/\$15.95



1701. \$24.95/\$18.95



3327. \$24.95/\$17.95



1560. \$29.95/\$22.95

Save on the best recent history titles.

No matter what area of history you enjoy reading about most, you'll find that History Book Club offers some of the finest selections being published today. And no book club we know of offers greater savings—as much as 30% off publishers' list prices.

You can save even more by taking advantage of our Introductory Offer. Select any three books on this page for \$1 each when you take a fourth book at the low Member's price—plus shipping and handling. Thereafter, you're not obligated to order any more books. You may cancel membership at any time by notifying History Book Club. We may cancel your membership if you elect not to buy at least one book in any six-month period.

How the Club works. You'll be able to choose from 150 to 200 books featured each month. History Book Club always offers its members well-made, long-lasting editions.

You'll receive our *Review* and a dated Reply Form 14 times a year (about every 4 weeks), plus up to 4 more offers of special selections. If you want the "Editors' Choice," do nothing—the book will come automatically. If you want another book, or no books at all, return the Reply Form by the date specified. A shipping and handling charge is added to each shipment.

Your HBC Guarantee: If you receive an unwanted "Editors' Choice" because you had less than 10 days to decide, simply return it and pay nothing.

(First price is Publisher's List. **Boldface** is Member's Price.)



History Book Club®
Camp Hill, PA 17012-8805

Please enroll me in History Book Club according to the no-risk, no-commitment terms outlined in the accompanying ad. Send me the four books whose numbers I have listed below. Bill me \$1 each for the 3 choices on the left, and the fourth at the low Member's price—plus shipping and handling. **H250-9-0**

--	--	--	--

9-13

Name _____ (Please print clearly.)

Address _____ Apt. # _____

City _____ State _____ Zip _____

All orders subject to approval. Prices generally higher in Canada.
© 1989 History Book Club, Inc.

MAILBOX

GODDARD AHEAD OF HIS TIME

In the Summer 1989 issue, the well-presented article on Robert H. Goddard's early rocket experiments brought out some shame in me, for in my early years (I am now seventy-eight), I can remember being at the movies and seeing "newsreels" ridicule Goddard's attempted rocket launchings—all of which failed. A Fourth of July skyrocket could do better. I laughed as loud as anyone else, but Goddard was far ahead of all of us.

My hat is off to *American History Illustrated*. Of all the magazines I receive or see, it is the best. I read it from cover to cover. The articles are always clear, well written, and helpfully illustrated. The subject matter is always an excellently informative

section of American history, living up to the title—and you don't have to go through pages and pages of advertising.

Keep up the good work.

—Albert W. Ullmann
Waldwick, New Jersey

MORE MAJOR PRESIDENTIAL DECISIONS

I especially enjoyed your recent [April] issue devoted to the American presidency. It exuded interesting facts and stories. Your brief biographies were a rare, unbiased, accurate assessment of our presidents.

I would like to add my own list of monumental presidential decisions [to author Peri E. Arnold's list of

fifteen presidential decisions that shaped America]: the Washington legacy; Lincoln's Emancipation Proclamation, his belief in "Malice to None" and in a united nation; Teddy Roosevelt and trust-busting; F.D.R. and World War II; Truman and the Korean conflict; Eisenhower's sending federal troops to Little Rock to enforce civil rights; Kennedy's promise to put a man on the moon; and Kennedy and the Cuban Missile Crisis.

Thank you for an educational and interesting magazine.

—Anthony C. Sottile
Columbia, Pennsylvania

TEDDY'S FOREST SERVICE?

As a retired forester with thirty-plus-years service with the U.S. Forest Service, I must let you know that President Teddy Roosevelt ["Presidential Profiles," April issue] did not "set up" the Forest Service. It was organized in 1878 in the Department of Agriculture [USDA] and was mainly an extension service for the private sector, including would-be tree farmers. However, Teddy *did* transfer most of the national forest land reserves from the Department of the Interior to the Forest Service, which remains in the USDA today.

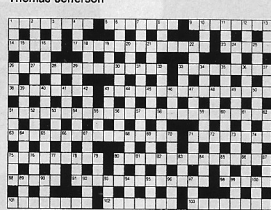
However, I do not fault writer Joseph Gustaitis; I enjoyed his brief synopses so much that I am saving them to let my Thai colleagues enjoy reading about U.S. presidents.

—Robert A. Ralston, Ph.D.
Bangkok, Thailand

The editors welcome comments from our readers. While we endeavor to publish a representative sampling of this correspondence, we regret that limited space prevents us from printing every letter. Address correspondence to Mailbox, *American History Illustrated*, Box 8200, Harrisburg, PA 17105. ★

PRESIDENTIAL TRIVIA PUZZLES

Thomas Jefferson



ACROSS
1. He was born in _____, Virginia on April 13, 1743.
2. His last name and surname he found in the purchase of New _____.
3. Among his many other pursuits, he was a successful _____.
4. Jefferson was an inventor, writer, and _____.
5. He served as _____ under John Adams.
6. _____ President of the United States was elected as a result of _____.
7. As Governor of the _____, Jefferson established _____.
8. After leaving the presidency he devoted his time to the founding of the University of _____.
9. While Governor, Jefferson is associated with the establishment of _____.
10. In 1776 he helped the committee that drafted the _____.
11. _____ General Washington to become President in 1789.
12. Jefferson was a member of _____.
13. The declaration of independence proposed that _____ created equal. (Thomas Jefferson)
14. The United States _____ was introduced in 1802.
15. Being a piglet from his birth, _____ had one of eleven tails in weight.
16. Jefferson designed _____ to replace what had been the southwest part of the United States.
17. _____ was also a language that Jefferson spoke.
18. _____ was a member of _____.
19. _____ was a member of _____.
20. _____ was a member of _____.
21. _____ was a member of _____.

DOWN
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____
31. _____
32. _____
33. _____
34. _____
35. _____
36. _____
37. _____
38. _____
39. _____
40. _____
41. _____
42. _____
43. _____
44. _____
45. _____
46. _____
47. _____
48. _____
49. _____
50. _____
51. _____
52. _____
53. _____
54. _____
55. _____
56. _____
57. _____
58. _____
59. _____
60. _____
61. _____
62. _____
63. _____
64. _____
65. _____
66. _____
67. _____
68. _____
69. _____
70. _____
71. _____
72. _____
73. _____
74. _____
75. _____
76. _____
77. _____
78. _____
79. _____
80. _____
81. _____
82. _____
83. _____
84. _____
85. _____
86. _____
87. _____
88. _____
89. _____
90. _____
91. _____
92. _____
93. _____
94. _____
95. _____
96. _____
97. _____
98. _____
99. _____
100. _____

Perfect for the history buff in your life.

Four original puzzles delivered each month. Presidential Trivia Puzzles are challenging to the experienced historian, educational and fun to the history novice.

Because the format of these games is not typical one can enjoy hours of thought provoking time deciphering the answers. Ideal for parents and children to do together!

Only \$18.00 for forty presidents! Subscribe today! Send your check or money order along with the coupon below to:

PRESIDENTIAL TRIVIA PUZZLES
15840 Ventura Blvd., #406, Encino, CA 91436.
Expect delivery within four to six weeks.

Yes! I would like to order Presidential Trivia Puzzles.

Name _____

Address _____

City _____

State _____

ZIP _____

ORDER NOW

The International Preview Society

Invites you to accept
The ultimate in sound...
The ultimate in savings...

3 COMPACT DISCS FOR JUST \$1

plus shipping and handling with Club membership

With No Obligation
To Buy Anything... Ever!

Horowitz
Plays
Mozart
15436

HOROWITZ PLAYS MOZART
Concerto No. 23 K. 488 - Piano Sonata K. 333
ORCHESTRA DEL TEATRO ALLA SCALA
CARLO MARIA CUILINI



Dvořák, Symphony No. 9 (From The New World)
Cleveland Orch./Dohnányi.
London 15065

Vivaldi, Concerto "L'Amoroso"; more
The English Concert/Pinnock.
Archiv 25187

Heifetz: The Decca Masters, Vol. 2 Lullaby (w/Bing Crosby),
Summertime, more. MCA 00605

Zimmerman: Chopin, The 4 Ballades Plus Barcarolle &
Fantasie in F Minor. DG 15332

Beethoven, Symphony No. 9 (Choral) Kenny, Walker, Power,
Salomaa. London Classical
Players led by Roger Norrington.
Angel 00467

Van Cliburn: Liszt & Grieg, Piano Concertos The
Philadelphia Orch./Ormandy.
RCA 00606

Berlioz, Symphonie Fantastique The Philadelphia
Orchestra/Muti. Angel 54244

The Digital Fox Organist Virgil Fox plays Toccata & Fugue in D
Minor, many more. Bainbridge
62889

Mozart, Serenade No. 3
Academy of Ancient Music/
Hogwood. L'Oiseau-Lyre 15000

Strauss, Don Quixote; Burleske Janigro, cello; Janis,
piano. Chicago Symphony
Orchestra/Fritz Reiner. RCA
63643

Perlman: Mozart, Violin Concerto No. 1; more
Vienna Phil./Previn. DG 25438

Viennese Bonbons Vienna
Philharmonic/Maazel. Tales
From The Vienna Woods, more.
DG 15287

Horowitz Plays Liszt Sonata in
B Minor, Consolation No. 3,
Funérailles, Ballade No. 2, more.
RCA 00511

Ravel, Boléro; La Valse; Rapsodie Espagnole; more
Montreal Sym./Dutoit. London
15199

Handel, Water Music The
English Concert/Pinnock. "Vital"
—Ovation Archiv 15306

The Academy—By Request
Academy of St. Martin/Marriner.
Sheep May Safely Graze,
Pastoral Sym., more. Angel
54094

Pavarotti At Carnegie Hall
Songs and arias by Schubert,
others. London 15311

Segovia Plays Bach
Chaconne, Siciliano, 3 Pieces
For Lute, many more. MCA
63600

Rubinstein: Brahms, Piano Concerto No. 2; more RCA
Sym./Krips. RCA 14760

Perlman: French Violin Showpieces Havanaisa,
Tzigane, Carmen-Fantasy,
more. New York Phil./Mehta.
DG 15457

Rimsky-Korsakov, Scheherazade Vienna
Philharmonic Orchestra/Previn.
Philips 15415

The Performing Piano, Vol. 1
Live performances by
Paderewski, Rachmaninoff,
Schnabel, others. Newport
Classic 14708

Gregorian Chant Schola of the
Hofburgkapelle. 10 Props from
the "Graduale Romanum", more.
Philips 15434

Vivaldi, The Four Seasons
Simon Standage; English
Concert/Pinnock. Archiv 15356

Rachmaninov, Symphony No. 1 Concertgebouw
Orchestra/Ashkenazy. London
15347

Holst, The Planets Montreal
Sym./Dutoit. "Stunning."
Gramophone London 15448

Itzhak Perlman: Brahms, Violin Sonatas; more Vladimir
Ashkenazy, piano. Angel 33760

Ute Lemper Sings Kurt Weill
Mack The Knife, Speak Low, I'm
A Stranger Here Myself, more.
London 15163

Beethoven, Symphony No. 6 (Pastorale); more Hogwood
cond. L'Oiseau-Lyre 25397

Copland, Appalachian Spring (Complete); more St. Louis
Sym./Slatkin. Angel 54176

Strauss, Also sprach Zarathustra Chicago
Symphony/Reiner. 63627

Bach, Brandenburg Concertos Nos 4-6 The English
Concert/Pinnock. Archiv 25417

Rachmaninov, Piano Concerto No. 2; more Evgeny
Kissin, piano. RCA 00915

Kiri te Kanawa Sings Gershwin Somebody Loves Me,
I Got Rhythm, The Man I Love,
Summertime, more. Angel
70258

Scarlatti, 7 Sonatas; Larghetto; Gavotte & Pastorale, more Narciso Yepes,
guitar DG 15497

Adams, The Chairman Dances; more San Francisco
Symphony/deWaar. Nonesuch
00491

James Galway's Greatest Hits
Memory, Angel Of Music, Sabre
Dance, more. RCA 73233

Respighi, Pines Of Rome; Fountains Of Rome; Roman Festivals Phila. Orch./Muti.
Angel 34443

Ashkenazy: Rachmaninov, Piano Concerto No. 1; more
Haitink cond. London 25153

Andrés Segovia Plays Rodrigo, Ponce & Torroba
Fantasia para un Gentilhombre,
Castles Of Spain, more. MCA
63579

Rhapsody In Electric Blue
J. R. Baker, synthesizers.
Rhapsody In Blue, more.
Newport Classic 34647

Mozart, Overtures Magic Flute,
Marriage Of Figaro, more.
Marriner conducts. Angel 34267

Digital Juke Box Boston Pops/
Williams. Girl From Ipanema,
more. Philips 25059

Mussorgsky, Pictures At An Exhibition; more Montreal
Sym./Dutoit. London 25314

SAVE 50%

INSTANT HALF-PRICE BONUS PLAN

Unlike other clubs, you get 50%-off Bonus Savings with every CD you buy at regular prices, effective with your first full-price purchase!



This remarkable \$1 CD offer is being made to introduce you to an outstanding classical music membership—with never any obligation to buy.

You'll find hundreds of outstanding Compact Discs in each issue of the Society's magazine, which will be sent to you approximately every 3 weeks. That gives you 19 convenient, shop-at-home opportunities a year. But there is no obligation to accept any offering at any time.

You choose only the music you want!

If you'd like to accept the Main Selection, you need not do a thing. It will be sent automatically. If you'd prefer an alternate selection or none at all, just mail back the Notification Card by the specified date. You'll always have at least 10 days to decide. But if you don't, you may return your Main Selection at our expense. You may cancel your membership

whenever you wish, simply by writing to us. Or, remain a member and take advantage of future money-saving bargains.

Substantial savings with our bonus plan.

For every regular purchase you do make, you'll receive bonus certificates good for discounts up to 50% off. (Shipping/handling added to each shipment.)

3 Compact Discs for just \$1!

Begin your membership now by choosing any 3 CDs shown here for just \$1 plus shipping and handling. Send no money now. We want you to judge for yourself before you decide to become a member. If not delighted, return your 3 CDs at the end of 10 days without obligation.

The International Preview Society

P.O. Box 91412 • Indianapolis, IN 46291

☐ **YES!** Please accept my membership in The International Preview Society and send me, for 10 days' FREE examination, the 3 CDs I have indicated below, under the terms of this offer. I may return them after 10 days and owe nothing, or keep them and pay only \$1 (shipping and handling added to each shipment). I understand that I'm not obligated to buy anything...ever!

Write Selection Numbers Here:

--	--	--

☐ Mr. ☐ Mrs. ☐ Miss First Name Initial Last Name (PLEASE PRINT)

Address _____ Apt. _____

City _____ State _____ Zip _____

Telephone (Area Code) _____

Signature _____

NOTE: Members will be serviced by the BMG Compact Disc Club; current BMG CD Club members not eligible. **YGPEG** **BF**

Limited to new members, continental U.S.A. only. One membership per family. We reserve the right to request additional information or reject any application. Local taxes, if any, will be added.

Editor ED HOLM
 Departments Editor GENEVA B. POLITZER
 Articles Editor KATHLEEN DOYLE
 Editorial Secretary VIRGINIA P. STIMMEL
 Graphic Design ORR COMMUNICATIONS

Group Publisher ALAN S. HUMASON

ADVERTISING

HARRISBURG: MacDonald Kennedy, Advertising Sales Manager; Diane C. Meyers, Advertising and Classified Sales Representative, 2245 Kohn Road, P.O. Box 8200, Harrisburg, PA 17105-8200. (717) 657-9555.

SOUTHEAST: Herb Schmitt & Company, Publishers Representatives, 4001 Weatherburn Way, Norcross, GA 30092. (404) 441-0946.

MIDWEST AND WEST COAST: Advertising Media Sales, Thomas Lamberson, 15W700 Frontage Road, Suite 235, Hinsdale, IL 60521. (312) 887-9503.

CANADA: American Publishers Representatives, Ltd., Garry Power, 41 Britain St., Suite 303, Toronto, Ontario, M5A 1R7. (416) 363-1388.

CIRCULATION

Circulation Director SUSAN SIDLER
 Circulation Promotion Manager GAIL WEAVERLING
 Circulation Fulfillment Manager HEIDI MILLER

MANUFACTURING

Director of Manufacturing DOMINICK P. ELSENER
 Production Manager TYRONE DICKEY
 Production Assistant JULIE HOFFMAN

COWLES MAGAZINES

President CHRISTOPHER M. LITTLE
 Vice President, Finance and Administration RICHARD S. WILLIS
 Vice President, Circulation and Marketing HAL ORINGER

Founder ROBERT H. FOWLER

A Cowles Media Affiliate

American History Illustrated (ISSN 0002-8770) is published bimonthly by Cowles Magazines, 2245 Kohn Road, P.O. Box 8200, Harrisburg, PA 17105-8200. Subscriptions: U.S., \$20 per year; foreign, \$26. Second Class postage paid at Harrisburg, PA 17105 and at additional mailing offices. Printed by World Color Press, Effingham, IL. Postmaster: Send address changes to American History Illustrated, P.O. Box 1776, Mt. Morris, IL 61054. Subscription questions: Call (800) 435-9610 (in Illinois, (815) 734-6309). American History Illustrated accepts no responsibility for unsolicited manuscripts not accompanied by return postage. Copyright 1989 by Cowles Magazines, Inc. All Rights reserved. Permission to reproduce the issue or portions thereof must be secured in writing from the publisher. American History Illustrated is available on microfilm and microfiche from University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, MI 48106.

HISTORY TODAY

New Home for Photography

International Museum of Photography Opens New Center

The International Museum of Photography at George Eastman House, renowned the world over for the scope and excellence of its photographic collections, moved into new, larger quarters early this year. Since the creation of the museum in 1940, its materials had been housed in the Rochester, New York mansion of photography industry pioneer George Eastman (1854-1932).

The three-level, 73,000-square-foot center, incorporating museum galleries and state-of-the-art archive and research facilities, was built immediately adjacent to the Eastman mansion. Funds for the \$10.5 million complex were raised through volunteer efforts by Rochester citizens. The building program and associated fund-raising began in 1985 after the museum's directors, facing operating deficits and realizing that the existing facilities were no longer adequate for housing and protecting the priceless collections, considered turning them over to the Smithso-

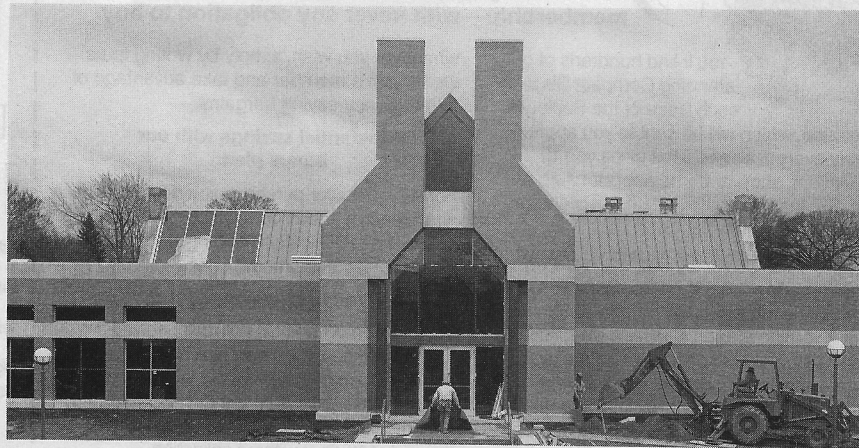
nian Institution in Washington, D.C.

Public areas in the complex include a visitor orientation area and three major exhibit galleries, a motion picture theater, and a museum bookstore. Research and storage facilities include a 25,000-volume library, film and still-photograph study centers, and technology and photo archives.

The museum's holdings—incorporating three major collections acquired between 1938 and 1953—number about three-quarters of a million items, including nearly 600,000 photographic prints, 100,000 negatives, 6,000 motion picture films, and 11,000 cameras and related items of photographic technology. A \$16 million endowment from the Eastman Kodak Company will help fund continuing use and preservation of the collections.

Eastman's palatial thirty-seven-room Georgian mansion, closed for extensive restoration following transfer of the collections to the new center, is scheduled to reopen to the public in January 1990. Museum officials expect up to a half-million visitors a year at the enlarged complex, located at 900 East Avenue in Rochester.

The museum is open 10:00-4:30 Tuesday through Saturday and 1:00-4:30 on Sunday. An admission fee is charged. For more information, phone 716-271-3361. ★

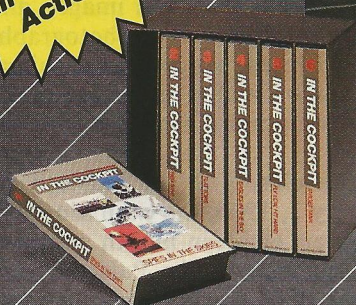


*Climb Aboard The Most Awesome Combat Aircraft in the World.
Be there...*

IN THE COCKPIT

**The Video Library
of Today's Airpower**

**Spectacular
Air Combat
Action!**



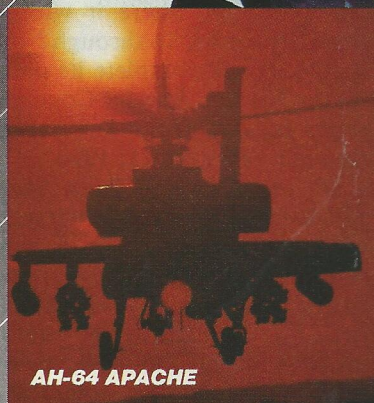
**Attack Aircraft in Action!
Carrier Launched Strikes!
Soviet Aircraft Up Close!
High Flying Spy Planes!
... And Much More!**



F-18

F/A-18 HORNET

BONUS!
Includes Actual
Footage of Jan. 4, 1989
Shootdown of Libyan
MIG-23's.



AH-64 APACHE



F-16

©1989 MBI

Stand an F-15 Eagle on its tail, and feel its twin 23,000 lb. thrust engines and afterburners rocket you to 60,000 ft.! Catapult off a flat top in an F-14 Tomcat, roaring from 0 to 170 mph in just 3 seconds!

Now you can experience the thrill of flying the most formidable combat aircraft in the world — planes of electrifying capabilities, astonishing supersonic speeds, and dazzling arrays of weaponry. It's all in a new, all-action video library, **IN THE COCKPIT**. Featuring spectacular combat footage and narration written by leading experts on military aviation.

Six Action-Packed Videos

You'll receive six exciting videos, filled with authentic, breathtaking action. Go on a mission aboard the finest reconnaissance aircraft built, the incredible SR-71 Blackbird in **Spies in the Skies**. Fly with dedicated spy planes like the ones used over Cuba and Vietnam. In **Red Star** see close-ups of the new Soviet MiG-29. See the Famous Hind and Halo attack helicopters in remarkable footage from Nicaragua and Afghanistan. Fly carrier launched air strikes against North Vietnam in **Flat Tops**, and search for Soviet submarines in the Hawkeye.

In **Eagles in the Sky**, fire Phoenix missiles from the Navy's F-14 Tomcat, and

fly the Air Force's F-15 Eagle and F-16 Falcon on air superiority missions. In **Fly Low, Hit Hard** see ground attack action in Vietnam with the nimble A-4 Skyhawk and the most feared ground attack aircraft in the world like the Thunderbolt II and the battle-proven Israeli Kfir. And in **Target Tank**, witness combat helicopter action on the modern battlefield.

Attractively Priced, Convenient Monthly Installments

IN THE COCKPIT is available exclusively from Easton Press Video. Each set of six videos—60 minutes each—comes in a handsome library case and is priced at just \$149.75* payable in convenient monthly installments. To order, simply return the attached coupon or call the Toll-Free number. If you are not totally satisfied, return your set within 15 days for a full refund. Order today to avoid disappointment!

* plus 4.75 shipping/handling per set.

CALL TOLL FREE 1-800-367-4534

Easton Press Video
47 Richards Avenue
Norwalk, Conn. 06857

Satisfaction
Guaranteed

For Fastest Service Call Toll-Free: 1-800-367-4534

Yes! Please send me the **IN THE COCKPIT** video library. I understand only VHS format is available.

Name _____
PLEASE PRINT CLEARLY

Address _____

City/State/Zip _____

Signature _____ (All orders subject to acceptance)

Charge each of 6 equal monthly installments of \$25.75* to my credit card:

☐ VISA ☐ MasterCard ☐ American Express ☐ Diners Club

Credit Card No. _____ Exp Date _____

☐ I prefer not to use a credit card and will pay by check. Enclosed is my deposit of \$50.00*. I will pay the balance of \$104.50* in three monthly installments of \$34.83* each.

*Conn. residents add 7½% sales tax. Tenn. residents add 7¼% sales tax.

Allow 2 to 4 weeks for shipment.

170

AMERICAN GALLERY

Photography on Exhibit

On the Art of Fixing a Shadow

The most ambitious pictorial celebration of this sesquicentennial year of photography opened May 7 at the National Gallery of Art in Washington, D.C. Organized jointly by the National Gallery and the Art Institute of Chicago, the exhibition of more than four hundred photographs has since moved on to the Art Institute, where it will show from September 16 through November 26. It will complete its national tour at the Los Angeles County Museum of Art from December 21 through February 25, 1990.

On the Art of Fixing a Shadow: 150 Years of Photography traces the evolution of photography as a pictorial device from its announcement to the present day. The exhibition demonstrates that while photography was invented in 1839, the medium's ever-changing potential has been rethought and revised countless times, with each improvement to the process and each new cultural mandate. The more than two hundred photographers represented range from nineteenth-century pioneers Louis Jacques Mandé Daguerre and William Henry Fox Talbot to twentieth-century masters such as Edward Weston and Ansel Adams.

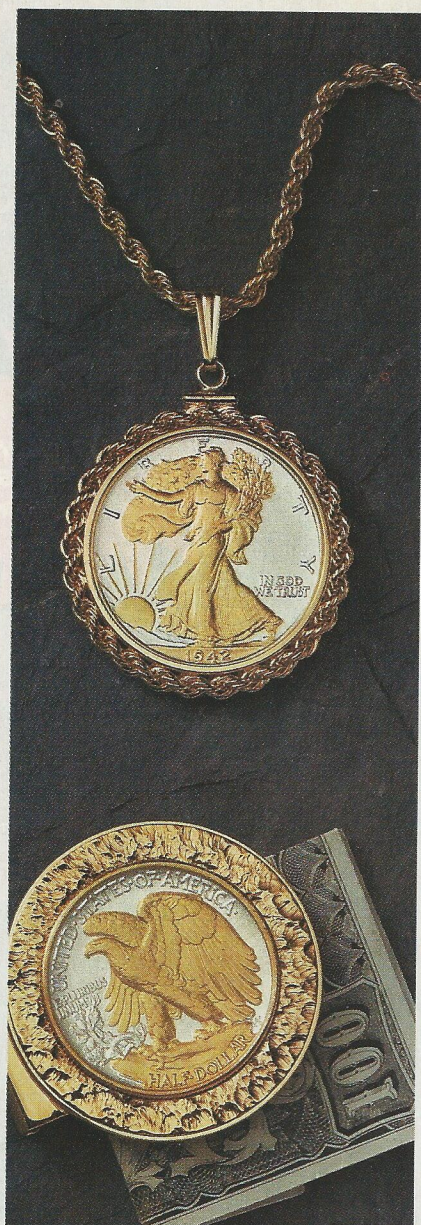
American Photography 1839-1900

The International Museum of Photography at George Eastman House will commemorate photography's sesquicentennial with a major exhibition opening on September 29. Drawing heavily on the museum's world-renowned collections, the exhibit will showcase two hundred masterpieces ranging from daguerreotypes, Civil War images, and U.S. Geological survey photographs to Eadweard Muybridge's animal locomotion studies and works of the art photography movement of the 1890s.

After closing at the museum on January 7, 1990, the exhibition will make an eighteen-month national tour, showing at the Palace of the Legion of Honor in San Francisco; Terra Museum of American Art in Chicago; Whitney Museum of American Art in Stamford, Connecticut; Toledo Museum of Art in Ohio; Virginia Museum of Fine Arts in Richmond, and Worcester Art Museum in Massachusetts.

O Say Can You See: American Photographs 1839-1939

Documenting the first century of American photography, this selection of about 125 pictures from a leading private collection will be on exhibit from October 12 through December 12 at the Bowdoin College Museum of Art in Brunswick, Maine. It comprises the first major public showing of materials gathered since 1960 by George R. Reinhart, a preeminent collector of historic images. The exhibition, assembled earlier this year by the Berkshire Museum in Pittsfield, Massachusetts, includes works by such photographers as Mathew Brady, Alexander Gardner, Timothy O'Sullivan, William Henry Jackson, Alvin Langdon Coburn, and Alfred Stieglitz. ★



©1989 CARTWHEELS

NEVER BEFORE – has pure gold been added to perhaps the most beautiful of all United States silver coins – **The Walking Liberty** half dollar.

Our bi-tone process by which 24k gold is applied to coins with **extreme precision**, creates a magnificent two tone of precious metals. These high **quality** silver and gold coins are fashioned by and are available only through Cartwheels.

The necklace, complete with a 14k gold filled 24" chain is \$139. If possible, we would like to send a date meaningful to you between the years 1936 and 1947.

The money clip at \$79. is generously covered with pure 24k gold.

Our exclusive coin cover, Lenscote II, permanently seals and protects these authentic coins. A numbered Certificate of Authenticity comes with each piece and all are gift wrapped. We guarantee a full refund, if on receipt, you are not completely delighted. Price is subject to change.

OVERNIGHT DELIVERY AVAILABLE

CARTWHEELS Order TOLL FREE
6160 N. Cicero Ave. 24 HOURS-7 DAYS
Chicago, IL 60646 1-800-441-7666

Send _____ Necklace(s) Date(s) _____ Money Clip(s) _____

Check Enclosed \$ _____ Charge AX, MC, VISA \$ _____
Add \$3.00 for UPS shipping and insurance (\$5.00 Air-\$14.00 overnight)
(Illinois residents add 9% sales tax)

Card No. _____

Exp. Date _____ Telephone No. () _____

Name _____

Address _____

City/State/Zip _____



"I WOULD STRIKE DOWN MY OWN BROTHER."



An Elite Spy
Rose Greenhow (shown with her daughter), a prominent Washington hostess, gathered intelligence for the South at high-level parties.

The nation was caught in a shattering crisis. From Illinois, one brother wrote another in Virginia, "I would strike down my own brother if he dare to raise a hand to destroy the flag." Hot-blooded J.E.B. Stuart resigned from the U.S. Army, renouncing his father-in-law, a Union general. In South Carolina war broke out; a young Confederate officer returned fire on Fort Sumter and an old friend, his West Point artillery instructor. It was a war between brothers.

With a roar, the drama unfolds.

TIME-LIFE BOOKS presents a magnificently illustrated series THE CIVIL WAR. The complete story as it has never been told before.

To begin, you'll explore the forces driving North and South apart...follow bloody raids in Kansas and at Harper's Ferry...listen to the clamor of Wide-Awakes and Southrons for Union or Secession...and watch, hour by hour, the fall of Fort Sumter.

A sweeping new account of America's greatest trial.

Examine the first book, *Brother Against Brother*, as our guest.

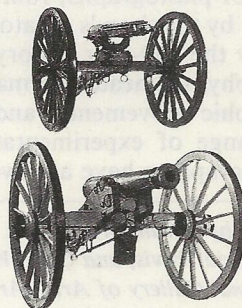
Then, in following volumes the series will take you from Bull Run and the early Southern victories through that bloodiest day of all, Antietam, to harrowing moments as quiet country towns like Gettysburg and Vicksburg are swept into battle.

The editors have searched out personal accounts to add human drama to the story. The irony of Capt. Theodor Carter, C.S.A., fatally wounded in sight of his boyhood home. The humor of a young officer ordering battlefield visitor Abraham Lincoln to "Get down, you damn fool!" as bullets whined past. And the books are filled with great pictures—many never before published—making this series a landmark on the subject.

To see *Brother Against Brother*, mail the card today.

The Gray Ghost Colonel John S. Mosby and his band of guerrillas rode rings around 50,000 Union troops defending Washington—even spirited off a Northern general in his union suit.

THE CIVIL WAR



The Weapons
The war spurred such innovations as the model 1865 Gatling gun (top), submarines and reconnaissance balloons. The barrel of this smoothbore 6-pounder (bottom) was rifled for extra accuracy and range.

If card is missing, mail this coupon to: TIME-LIFE BOOKS, Box C-32066, Richmond, VA 23261-2066.

YES! Send me *Brother Against Brother* for 10 days' free examination as my introduction to THE CIVIL WAR series. If I keep it, I pay only \$4.99 plus shipping and handling—a special savings of \$10.00. Also send me future volumes under the no-obligation terms described in this ad. With TIME-LIFE BOOKS' Unconditional Guarantee of Satisfaction, I can return any of the books I've paid for, at any time, for a full refund.

DNDWG8

Name _____ (Please Print)

Address _____ Apt. _____

City _____

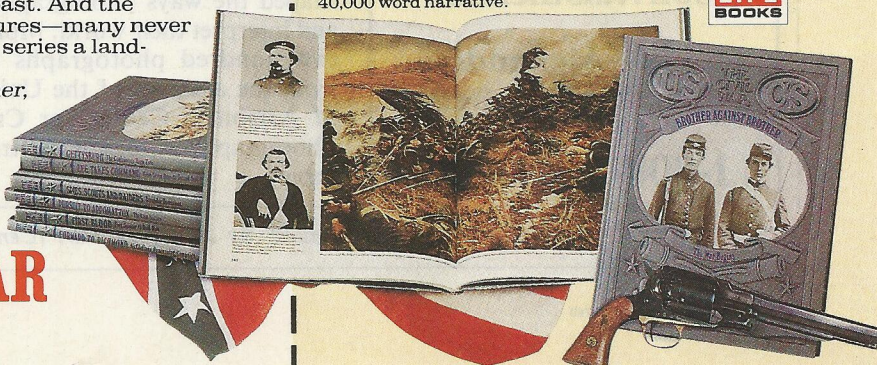
State _____ Zip _____

All orders are subject to approval. Price subject to change.

OWN BROTHER AGAINST BROTHER FOR JUST \$4.99

Classic Editions: Each volume 9 1/2" x 11" * Approximately 176 pages * Embossed hardcover bindings * More than 140 illustrations per book—photos, paintings, battle maps, drawings—many never published before * Rare quotes from diaries and letters * Informative, 40,000 word narrative.

TIME LIFE BOOKS



© 1989 Time-Life Books, Inc.

Want to brush up on a foreign language?



With Audio-Forum's intermediate and advanced materials, it's easy to maintain and sharpen your foreign language skills.

Besides intermediate and advanced audio-cassette courses—most developed for the U.S. State Dept.—we offer foreign-language mystery dramas, dialogs recorded in Paris, games, music, and many other helpful materials. And if you want to learn a *new* language, we have beginning courses for adults and for children.

We offer introductory and advanced materials in most of the world's languages: French, German, Spanish, Italian, Japanese, Mandarin, Greek, Russian, Portuguese, Korean, Norwegian, Swedish, and many others.

CALL 1-800-243-1234 FOR FREE 32-PAGE CATALOG, OR WRITE:

AUDIO-FORUM®

Room C901, 96 Broad Street,
Guilford, CT 06437 (203) 453-9794

NOVA SCOTIA

**"I have traveled
around the globe.
I have seen the
Canadian and
American Rockies,
the Andes, the
Alps, and the
Highlands of
Scotland; but for
simple beauty,
Cape Breton
outrivals them all."**

**— Alexander
Graham Bell**

1-800-565-0000

(It's a real number; honest!)

HISTORY BOOKSHELF

Books on Photography

On the Art of Fixing a Shadow: One Hundred and Fifty Years of Photography

The most lavish of several photographic books published this year, this is the companion volume to the major exhibition organized by the National Gallery of Art and the Art Institute of Chicago (page 10). Much more than an exhibition catalog, it features, in addition to 198 color and 252 duotone reproductions of photographs, four in-depth essays by the show's curators. These review the 150-year history of photography, delineate the major photographic movements, and explore the range of experimentation that photographers have achieved.

Essays by Sarah Greenough, Joel Snyder, David Travis, and Colin Westerbeck (National Gallery of Art / Art Institute of Chicago / Little, Brown and Company, Boston, 1989; 510 pages, illustrated, \$75.00 hardcover, \$35.00 paper).

Decade by Decade: Twentieth-Century American Photography

Eight essays by eight different critics and historians provide an insightful decade-by-decade overview of twentieth-century American photography, examining the ideas, events, and connections that have shaped the ways photographers see and interpret their world. More than two hundred photographs drawn from the archives of the University of Arizona's Center for Creative Photography in Tucson illustrate the survey.

Edited by James Enyeart (Center for

Creative Photography at the University of Arizona / Little, Brown and Company, 1989; 246 pages, illustrated, \$40.00).

O Say Can You See: American Photographs 1839-1939

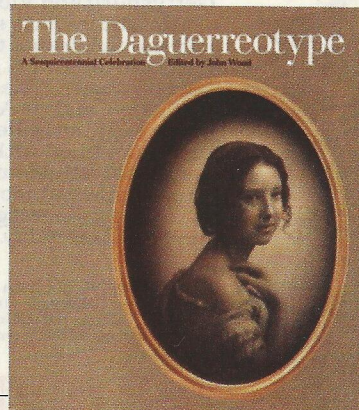
Published in conjunction with an exhibition organized by the Berkshire Museum (page 10), this volume of photographs from the George R. Reinhart collection is notable for the numerous rare views that will be unfamiliar even to serious students of photographic history. The more than one hundred photographs, spanning the first century of American photography, are superbly reproduced in duotone and color.

by Thomas Weston Fels (The Berkshire Museum / MIT Press, Cambridge, 1989; 143 pages, illustrated, \$50.00).

The Daguerreotype: A Sesquicentennial Celebration

In this beautiful volume, nine essays on the history, technology, artistic, and social aspects of the daguerreotype are complemented by more than one hundred reproductions of daguerreotypes. The views, including thirty-four in color, have never before appeared in any book.

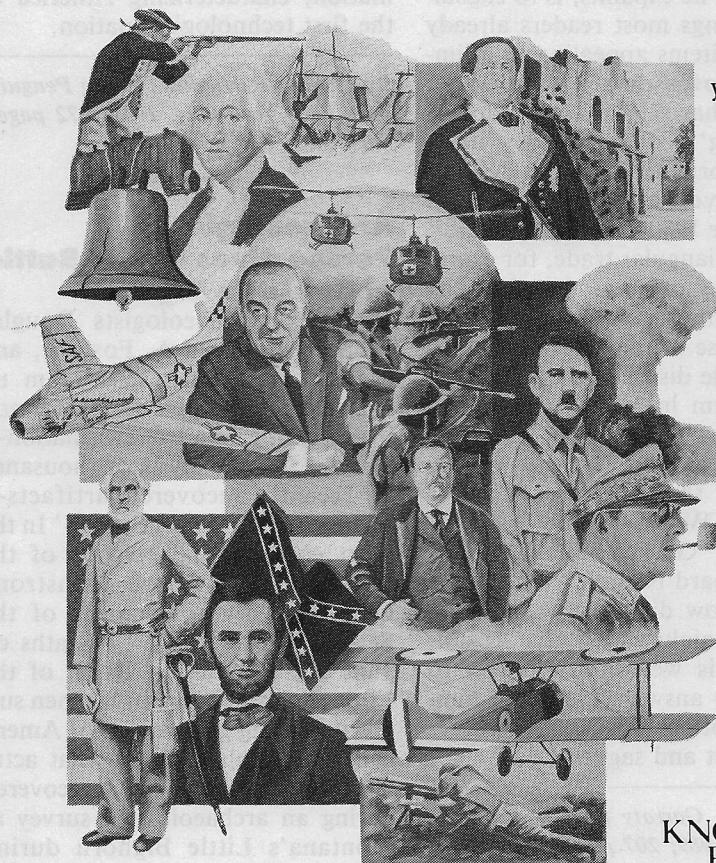
Edited by John Wood (University of Iowa Press, Iowa City, 1989; 224 pages, illustrated, \$50.00).



America's Wars ...

As You've Never Heard Them!

Hear *how* and *why* the United States has gone to war
in a compelling drama narrated by
George C. Scott.



Here, for the first time, is a comprehensive, dramatic history of the United States at War — on audio cassettes! Our nation's nine major wars are explained so clearly that you'll never forget them — or the lessons they have taught us.

More than a military history, these cassettes explore the political, economic and social forces that have erupted in warfare. You'll come to understand the forces that cause war — irreconcilable political principles, trade disputes, territorial ambition, and even fear.

You'll feel the immediate desolation and misery that war always brings. And you'll learn how a war's political legacy may produce more lasting damage. From later cassettes in the Audio Classics Series®, you'll relive the creation and adoption of The U.S. Constitution (narrated by Walter Cronkite), discover the insights of The Giants of Political Thought, and understand economic progress and conflict in The Great Economic Thinkers (narrated by Louis Rukeyser). With the Audio Classics, you'll begin to recognize patterns in *today's* news that will produce *tomorrow's* successes and failures.

\$1.00 TRIAL OFFER.

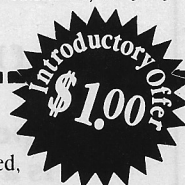
For only \$1.00 plus shipping and handling, you can begin your subscription to the Audio Classics Series®. You have the right to return the current selection for any reason within 15 days, and you may cancel at any time. Don't miss this opportunity to be delighted, horrified and profoundly moved by history's greatest lessons!

To order, complete and mail the coupon below or call us toll-free — 1-800-876-4332.

**KNOWLEDGE®
PRODUCTS**

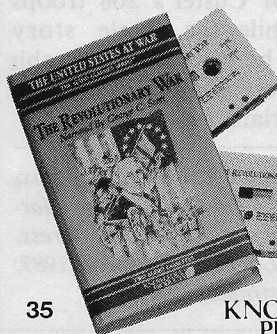
Customer Service Center
P.O. Box 305151 • Nashville, TN 37230

1-800-876-4332



☐ **YES!** Send me, for \$1.00 plus \$2.00 shipping and handling, *The American Revolution, Part I*, and begin my no-risk subscription to the AUDIO CLASSICS SERIES. I will receive an album of two cassettes every 4 weeks for as long as I wish, and you'll charge my credit card \$14.95 plus \$2 shipping and handling (\$4 outside the U.S.) for each set. If I'm ever displeased, I have the right to return the current selection within 15 days and owe nothing. I may cancel at any time without penalty.

Charge my ☐ VISA ☐ MasterCard ☐ American Express



Account No. _____ Exp. _____

Signature _____

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____ We will call only if there is a problem with your order.

FOCUS ON THIS!

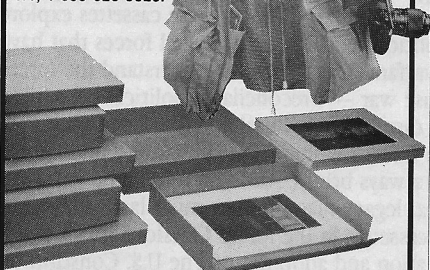


Look to **Light Impressions** for:

- Safe storage materials for prints, negatives, & slides.
- Presentation & display systems.
- Tools & supplies for matting & framing.
- Light boxes, print washers, tripods, & other equipment for the studio & darkroom.
- The finest photography books.



Write or phone now for your **FREE** copies of our *Archival Supplies Catalog* and *Photography Books and Supplies Catalog!* 1-800-828-6216; in NY, 1-800-828-9629.



LIGHT IMPRESSIONS®

Dept. 598R, 439 Monroe Ave., Rochester, NY 14607

NOVA SCOTIA

Leaf Peepers:

**Cape Breton
is a whole
new leaf
on life.**

1-800-565-0000

(It's a real number, honest!)

HISTORY BOOKSHELF

1,001 Things Everyone Should Know About American History

History can be downright fun, historian John A. Garraty here proves in a lively work that provides readers with concise, humorous entries designed to entertain and stimulate additional interest in a myriad of topics from America's past. Garraty's intent, he explains, is to capsule not things most readers already know nor items appealing to a limited "professorial" audience; rather, he has selected at random a "grab bag" of generously illustrated information—some delightfully irreverent—from colonial times to the 1980 "commando raid" on Iran. Triangular trade, for example, Garraty explains, "took many forms, the most notorious involving the purchase of molasses in the Caribbean, the distilling of the molasses into rum in New England, the exchange of the rum for slaves in West Africa, and the sale of the slaves to the Caribbean sugar planters." What was the origin of the term "Gerrymander"? How about Richard Nixon's "Checkers" speech? How did John Adams acquire the nickname "His Rotundity"? This welcome addition to any library answers these and hundreds of other questions with refreshing wit and sagacity.

By John A. Garraty (Doubleday, New York City, 1989; 207 pages, illustrated, \$19.95)

American Genesis: A Century of Invention and Technological Enthusiasm

While many histories center on the political and economic factors that shaped the United States, this work focuses on technological advances as the driving force of the nation's development during the past one hundred years. Challenging the concept that today's America was shaped primarily by democracy and free enterprise, author Thomas P. Hughes theorizes that inventors, scientists, engineers, and systems builders made modern America,

and that the nation's culture mirrors the values instilled in the machines and processes these men and women created. Americans during the past century, says the author, were exhilarated by technology: "A nation of machine makers and system builders, they became imbued with a drive for order, system, and control." Hughes traces this transformation, characterizing America as the first technological nation.

By Thomas P. Hughes (Viking Penguin, Inc., New York City, 1989; 472 pages, illustrated, \$24.95)

Archaeological Perspectives on the Battle of the Little Bighorn

Historical archaeologists Douglas D. Scott, Richard A. Fox, Jr., and Melissa A. Conner here team up with firearms expert Dick Harmon in presenting detailed information—gleaned from analysis of thousands of recently recovered artifacts—about "Custer's Last Stand." In the most controversial episode of the Indian wars, George Armstrong Custer led five companies of the Seventh Cavalry to their deaths on June 25, 1876 in the Battle of the Little Bighorn. None of his men survived, leaving generations of Americans to speculate about what actually happened. Artifacts recovered during an archaeological survey at Montana's Little Bighorn during 1983-84, however, have provided the materials for fresh insights into the battle. This scholarly narrative describes the artifacts; explains how they shed light on battle movements and behavior patterns; evaluates troop movements, positions, and armaments; and suggests where and how many of Custer's 268 troops perished. While the whole story may never be pieced together, this volume answers questions that have baffled historians for years.

By Douglas D. Scott, Richard A. Fox, Jr., Melissa A. Connor, and Dick Harmon (University of Oklahoma Press, Norman and London, England, 1989; 297 pages, illustrated, \$24.95) ★

Own a 1940 Hemingway at the 1940 price, \$2.75

Call 1-800-345-8112 today.
The original editions of
Hemingway, Fitzgerald,
Faulkner, Steinbeck,
available again,
only from The
First Edition Library

Announcing the first printing of the originals in a generation.

To make the rare editions of these and other American classics available once again, The First Edition Library has now obtained exclusive rights from the original publishers.

The striking design of each First Edition Library volume is unique to its own era: the dust jacket artwork, hardcover bindings, type faces, illustrations, dedications; even the minor errors which collectors look for to identify genuine first editions.

These books have been produced to today's highest physical standards — acid-free paper, full-cloth covers, durable sewn bindings with protective slipcases.

Examine your first volume for 10 days, free

You'll receive *For Whom the Bell Tolls* as your introduction to The First Edition Library.

Enjoy it at home for 10 days, free. You may return it within 10 days and be under no further obligation or add it to your library for only \$2.75, the price at which it was originally published (plus postage and handling).

Then about every six weeks, you'll receive another classic volume on the same 10-day, free-examination basis, for the subscription price of \$27.50 plus \$2.45 postage, handling and applicable sales tax. There's never an obligation to buy and you may cancel any time.

Secure your copy of *For Whom the Bell Tolls* by mailing the coupon or calling today.

CALL TOLL FREE 1-800/345-8112

FREE 10-DAY EXAMINATION ACCEPTANCE

☐ Yes, send *For Whom The Bell Tolls* for free 10-day examination and enter my subscription to The First Edition Library under the terms described in the ad.

I understand there's never an obligation to buy and I may cancel at any time.

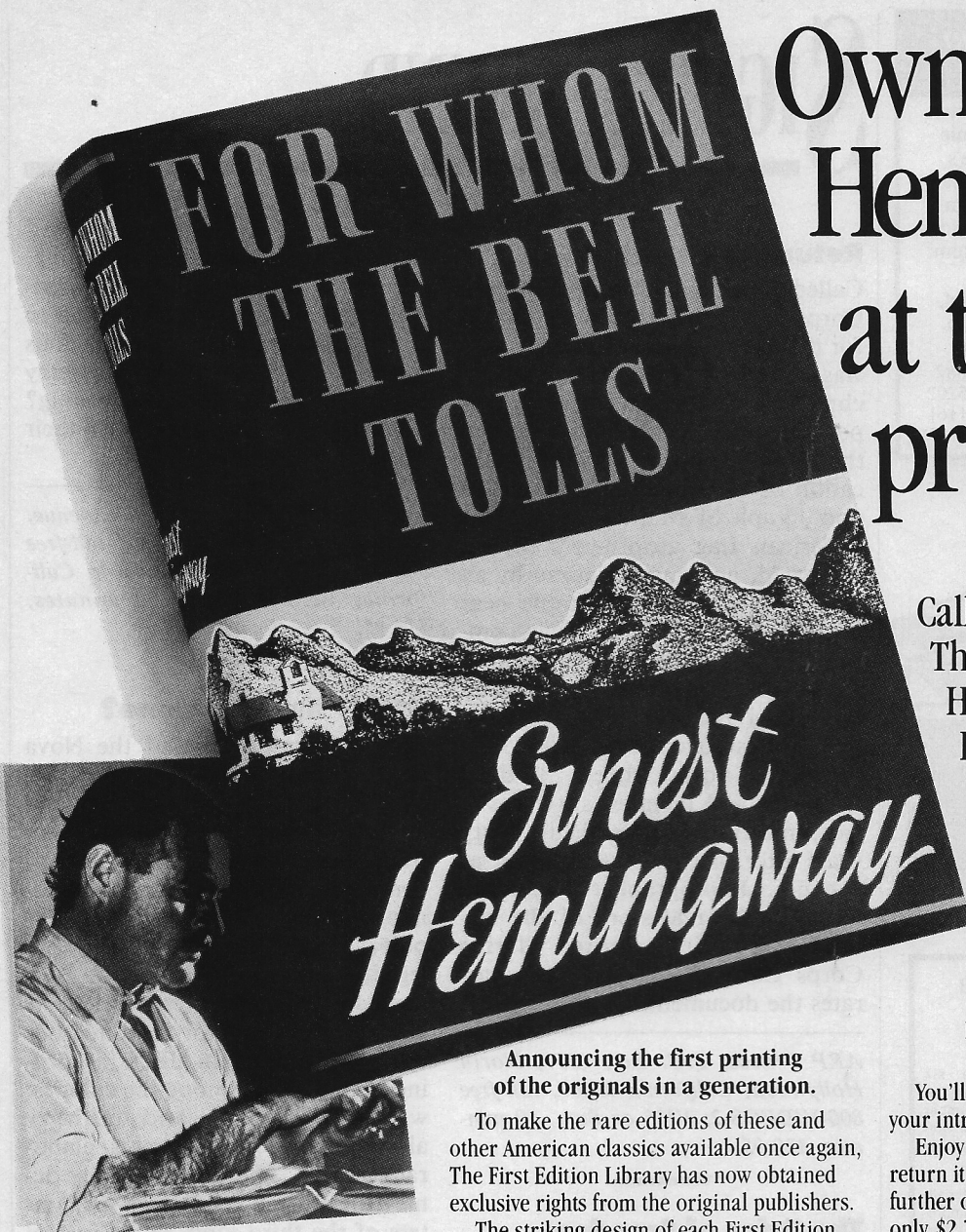
Name (please print)

Address Apt.

City State Zip

THE FIRST EDITION LIBRARY, Box 654, Holmes, PA 19043

DP 45



The original hardcover editions of *For Whom the Bell Tolls* — together with *A Farewell to Arms*, *The Great Gatsby*, *Tender is the Night*, *The Sun Also Rises*, *Cannery Row*, *On the Road*, *The Fountainhead*, *Miss Lonelyhearts*, *East of Eden* — have long been out of circulation, unavailable to all but the rare book trade where their value has skyrocketed.



EXPLORE THE HISTORY OF THE JURY TRIAL

From the "juries" of ancient Mediterranean civilizations and Germanic tribes — through Charlemagne's *Inquisitio* and King John's Magna Carta — to its place in American culture, this book traces the historical development of the jury trial system.

**The Jury: Tool of Kings,
Palladium of Liberty — 2nd Ed.**

by Lloyd Moore, clothbound, 312 pp.

Price: \$19.50 (\$22.50 incl shpg & hndlg)

Anderson Publishing Co. *Since 1887*
2035 Reading Rd. / Cinti. / Ohio / 45202
[(513) 421-4142 / FAX (513) 562-8116]

TOLL FREE 1-800-543-0883

ND



YOU OUGHTA BE IN PICTURES

if you have special props,
services, a unique home or
location/restoration that can

MAKE THE SCENE

800-937-7474

American History Illustrated Subscriber Service Information

**AMERICAN HISTORY
ILLUSTRATED**

☐ **MOVING?** Please give six weeks notice. If calling, give your new address, plus account number and old address from label. If writing, send address label and new address.

☐ **DUPLICATE ISSUES?** If calling, give address and account number from both labels. If writing, send both labels.

☐ **OTHER MAIL:** We occasionally allow other reputable firms to contact our subscribers if we feel their product or service is of value to our readers. If you would prefer not to receive such mail, just let us know.

☐ **TO RENEW:** To avoid lapse in service, renew as early as possible. If calling give expiration date and account number from label. If writing, send address label.

☐ **TO SUBSCRIBE:** Allow six weeks for delivery of your first issue.

One year (10) issues, \$20.00,
outside the U.S., add \$7.00

For questions regarding your subscription
CALL TOLL FREE 1-800-435-9610

Illinois Subscribers Please Call
815-734-6309

**AMERICAN HISTORY ILLUSTRATED
SUBSCRIBER SERVICE CENTER**

Box 1776
Mt. Morris, IL 61054

SIGHT & SOUND

Return to Iwo Jima

Called the bloodiest battle in Marine Corps history, the 1945 campaign for the Japanese island of Iwo Jima was one of World War II's most celebrated in terms of its strategic importance. The siege also captured the public's imagination with publication of the famed Joe Rosenthal photograph of Marines raising the American flag atop Iwo's Mount Suribachi, now memorialized by an equally famous bronze statue near Washington, D.C. This film combines historic battle footage with interviews of four former Marines and two surviving Japanese soldiers. Featured is coverage of a 1985 reunion of about three hundred American and Japanese survivors at Iwo, meeting in friendship forty years after they faced each other as enemies. Photographer Rosenthal also tells the real story of the historic flag-raising. Retired Marine Corps Colonel Ed McMahon narrates the documentary.

ARP Videos, P.O. Box 4617, North Hollywood, California 91607, toll-free 800-VIDEOS-2; VHS or Beta, 60 minutes, \$39.95.

The Price of Freedom

For as long as man has been fighting wars, he has been erecting monuments in honor of those who served and died in combat. This film focuses on some of the most notable monuments erected around the world in honor of America's war dead, primarily memorial cemeteries, each with its own special history. The audience sees the Washington Monument, the Lincoln Memorial, Gettysburg National Cemetery, and memorial cemeteries in France and Italy where American contributions to freedom are still keenly felt. Period film footage of past wars is accompanied by a dramatic narration that includes brief descriptions of major figures and victories. "We're reminded in the fields of France that tyranny, like history, repeats itself,"

the narrator announces, concluding, "If one is to understand the American experience he would do well to study here among our lost legions overseas. What kind of country were we? What were we seeking? These men have answered with their lives."

Video Sig, 1030C East Duane Avenue, Sunnyvale, California 94086, toll-free 800-245-6717 or 800-222-2996 in California; VHS or Beta, 60 minutes, \$14.95.

UFOs: Are We Alone?

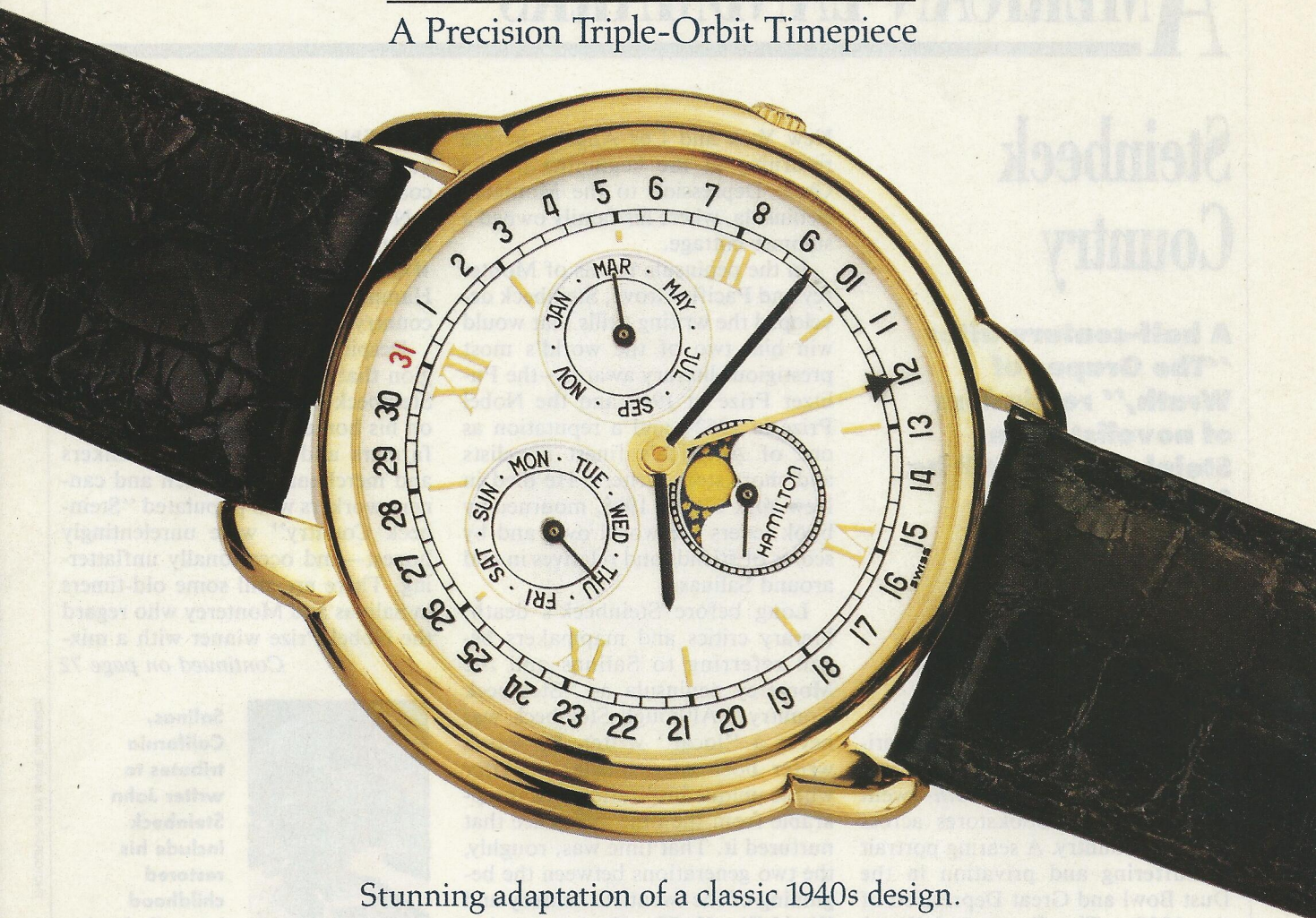
This production, one of the Nova Video Library "Adventures in Science" series, investigates fact and apparent fiction in reported unidentified flying objects (UFOs). Incidents cited range from *Apollo* astronauts shadowed by a mysterious object to an Arizona lumberjack allegedly abducted by aliens (he later passed a lie detector test). Scientists generally disclaim or find reasonable explanations for UFOs, according to this film. Among the culprits: weather balloons and military aircraft—and, in some cases, elaborate hoaxes. The film generally denies the existence of close encounters of the third kind, citing logical explanations for most sightings.

Vestron Video, P.O. Box 10382, Stamford, Connecticut 06901, toll-free 800-523-5503; VHS or Beta, 60 minutes, \$29.98.



HAMILTON MOON-PHASE

A Precision Triple-Orbit Timepiece



Stunning adaptation of a classic 1940s design.

A prestigious timepiece for people whose time is precious...the Hamilton Moon-Phase is brilliantly updated for the demanding style of the 1980s.

Its intricate triple-orbit design makes a striking fashion statement in any setting and is the height of elegance for every occasion.

The precision analog displays track the month, day, date, hour, minute and second, as well as the phases of the moon. All kept to pin-

point accuracy by a state-of-the-art Swiss quartz movement.

Each Hamilton Moon-Phase is richly finished with 5 microns of 18k gold and fitted with a genuine crocodile wrist band.

Flawlessly built *by hand* by the craftsmen of the world famous Hamilton Watch Company, the Moon-Phase is offered to you for just \$295,* payable in convenient monthly installments.

As an added luxury, your Hamilton Moon-Phase will be engraved on the back with up to three initials of your choice, at no additional charge.

Order now to avoid disappointment. If you are not completely delighted, return your watch in original condition within 30 days for a full refund. Phone orders shipped within 5-7 business days.

*Plus \$3.50 shipping/handling.

© 1989 MBI

Call Toll-Free: 1-800-367-4534

Hamilton Classics
47 Richards Avenue
Norwalk, Conn. 06857

For Fastest Service Call Toll-Free: 1-800-367-4534

Please send me _____ Hamilton MOON-PHASE watch(es).

Initials to be engraved on back:

Charge each of 8 installments of \$37.31 each to my credit card:

☐ MasterCard ☐ VISA ☐ Diners Club ☐ American Express

Credit Card # _____

Expiration Date _____

Name _____ PLEASE PRINT CLEARLY

Address _____

City/State/Zip _____

Signature _____ (All orders subject to acceptance)

☐ I prefer not to use a credit card and will pay by check. Enclosed is my deposit of \$99.50* for each watch. I will pay the balance as billed in four monthly installments of \$49.75 each.

*Connecticut residents add 8% sales tax. Tennessee residents add 7¼% sales tax.

AMERICAN LANDMARKS

Steinbeck Country

A half-century after "The Grapes of Wrath," reminders of novelist John Steinbeck can still be found in the California region that inspired his best work.

By **BRIAN MCGINTY**

Fifty years ago a great American novel—John Steinbeck's *The Grapes of Wrath*—went on sale in bookstores across the country. A searing portrait of suffering and privation in the Dust Bowl and Great Depression of the 1930s, *The Grapes of Wrath* stirred the consciences of readers throughout the world and quickly rose to the top of the best-seller lists.

As Americans pause to remember *The Grapes of Wrath* and its vision of struggle and hope, residents of the central California coast where Steinbeck was born and did his best writing are reflecting on the great author's legacy and the celebrity it has brought to the region.

Steinbeck was born in 1902 in Salinas, county seat of Monterey County and marketing center for an incredibly fertile agricultural region often called "the Salad Bowl" of the nation. There he passed his childhood years and attended school, working during the summers in a local sugar refinery. In the early 1920s Steinbeck traveled north to the San Francisco Bay area to attend Stanford University. The future literary giant left Stanford without earning a degree; he lived briefly in

New York and Los Angeles before returning at the beginning of the Great Depression to the Monterey Peninsula, where his family owned a summer cottage.

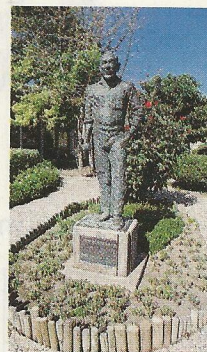
In the peninsula towns of Monterey and Pacific Grove, Steinbeck developed the writing skills that would win him two of the world's most prestigious literary awards—the Pulitzer Prize in 1940 and the Nobel Prize in 1962—and a reputation as one of America's finest novelists and short story writers. He died in New York City in 1968, mourned by book lovers the world over and by scores of friends and relatives in and around Salinas.

Long before Steinbeck's death, literary critics and mapmakers began referring to Salinas and the Monterey peninsula as "Steinbeck Country." Although Steinbeck was never a "local" writer, he was a writer born of a locale, a writer whose unique inspiration was inseparable from the time and place that nurtured it. That time was, roughly, the two generations between the beginning of the twentieth century and World War II. The place—a section of the central California coast corresponding more or less to the boundaries of Monterey County—was an

incredibly beautiful region of long valleys, wooded hills, and rocky coastline. "It is Steinbeck country," a New York book critic proclaimed around the time *The Grapes of Wrath* was published, "as surely as Hannibal, Missouri, is Mark Twain country."

Despite his close ties with the region that most inspired his writing, Steinbeck was not always popular on his home turf. His depictions of farmers and field hands, bankers and merchants, fishermen and cannery workers who populated "Steinbeck Country" were unrelentingly honest—and occasionally unflattering. There are still some old-timers in Salinas and Monterey who regard the Nobel Prize winner with a mix-

Continued on page 72



Salinas, California tributes to writer John Steinbeck include his restored childhood home (below) and statue at the Steinbeck Library (left).



PHOTOGRAPHS BY MARIE DIEDERICK

STAGE DOOR CANTEEN



44 Original Hits On Records & Tapes

YOU'LL NEVER KNOW Dick Haymes • **CHATTANOOGA CHOO CHOO** Glenn Miller/Tex Beneke/The Modernaires w/ Paula Kelly • **I'VE HEARD THAT SONG BEFORE** Harry James/Helen Forrest • **I'LL BE SEEING YOU** Bing Crosby • **MAIRZY DOATS** Merry Macs • **RUM AND COCA COLA** Andrews Sisters • **DANCE WITH A DOLLY (WITH A HOLE IN HER STOCKING)** Russ Morgan/Al Jennings • **DON'T FENCE ME IN** Bing Crosby & Andrews Sisters • **DON'T GET AROUND MUCH ANYMORE** Ink Spots • **YOU ALWAYS HURT THE ONE YOU LOVE** Mills Brothers • **I'LL NEVER SMILE AGAIN** Tommy Dorsey w/ Frank Sinatra & Pied Pipers • **BOOGIE WOOGIE BUGLE BOY** Andrews Sisters • **TO EACH HIS OWN** Ink Spots • **SWINGING ON A STAR** Bing Crosby • **COMIN' IN ON A WING AND A PRAYER** Song Spinners • **SHOO SHOO BABY** Andrews Sisters • **AC-CENT-TCHU-ATE THE POSITIVE** Bing Crosby/Andrews Sisters • **DEEP IN THE HEART OF TEXAS** Bing Crosby • **THERE ARE SUCH THINGS** Tommy Dorsey/Frank Sinatra & Pied Pipers • **DON'T SIT UNDER THE APPLE TREE (WITH ANYONE ELSE BUT ME)** Glenn Miller/Marion Hutton, Tex Beneke, The Modernaires • **I'LL WALK ALONE** Dinah Shore • **PIANO CONCERTO IN B FLAT** Freddy Martin/Jack Fina, piano • **THERE! I'VE SAID IT AGAIN** Vaughn Monroe • **AS TIME GOES BY** Rudy Vallee • **GREEN EYES** Jimmy Dorsey w/ Bob Eberly & Helen O'Connell • **TILL THE END OF TIME** Perry Como • **WHEN THE LIGHTS GO ON AGAIN (ALL OVER THE WORLD)** Vaughn Monroe • **IN THE MOOD** Glenn Miller • **I LEFT MY HEART AT THE STAGE DOOR CANTEEN** Sammy Kaye/Don Cornell • **DADDY** Sammy Kaye • **CHICKERY CHICK** Sammy Kaye • **DER FUEHRER'S FACE** Spike Jones • **MY DREAMS ARE GETTING BETTER ALL THE TIME** Les Brown/Doris Day • **SATURDAY NIGHT (IS THE LONELIEST NIGHT OF THE WEEK)** Frank Sinatra • **SOMEBODY ELSE IS TAKING MY PLACE** Benny Goodman/Peggy Lee • **I DON'T WANT TO SET THE WORLD ON FIRE** Horace Heidt/Larry Cotton/Donna Wood & Don Juans • **PRaise THE LORD AND PASS THE AMMUNITION** Kay Kyser • **(THERE'LL BE BLUEBIRDS OVER) THE WHITE CLIFFS OF DOVER** Kay Kyser • **I'LL GET BY (AS LONG AS I HAVE YOU)** Harry James/Dick Haymes • **IT'S BEEN A LONG, LONG TIME** Harry James/Kitty Kallen • **OH! WHAT IT SEEMED TO BE** Frankie Carle/Marjorie Hughes • **PISTOL PACKIN' MAMA** Al Dexter • **JINGLE, JANGLE, JINGLE** Kay Kyser/Julie Conway/Harry Babbitt • **SENTIMENTAL JOURNEY** Les Brown/Doris Day

**A History-Making Collection
From America's Finest Hours!**

Stage Door Canteen

**4 Big Records
3 Extra-Long
Cassettes!**

44 Original World War II Hits by the Stars That Made Them Famous

No other era in American history gave us so many great songs and fabulous artists as the years of World War II. This was the time in our history when the music helped to keep our spirits high, and to unite us toward victory.

Who can ever forget the great Sammy Cahn hit **IT'S BEEN A LONG, LONG TIME** sung so beautifully by Kitty Kallen . . . Glenn Miller telling America's sweethearts **DON'T SIT UNDER THE APPLE TREE (WITH ANYONE ELSE BUT ME)** . . . The Andrews Sisters setting America's juke boxes on fire with **BOOGIE WOOGIE BUGLE BOY** . . . the dances at the USO with such romantic hits as **THERE ARE SUCH THINGS** by Frank Sinatra, and Don Cornell's **I LEFT MY**

HEART AT THE STAGE DOOR CANTEEN. Here are 44 all-time classics for you to cherish for years to come. No American music library should be without this truly great collection.

No Risk Offer

All 44 STAGE DOOR CANTEEN original hits come on either 4 big Records . . . or 3 Extra-Long Cassettes. The price is only \$19.95, and if you don't play and enjoy this album as much as any you have ever owned, it won't cost you a penny. Simply return it for a full refund, absolutely no questions asked. STAGE DOOR CANTEEN is not in any store at any price and is available now only through this limited by-mail offer. So hurry and listen to the legend. Order your collection today!

Plus a FREE GIFT . . . yours for sending us your order within 30 days!

NOT IN STORES

MAIL COUPON TODAY!

NO-RISK COUPON

THE GOOD MUSIC RECORD CO., Dept. ST-05-99
352 Evelyn Street, P.O. Box 909, Paramus, NJ 07653-0909

YES please rush me the STAGE DOOR CANTEEN COLLECTION to preview for 30 days without obligation. I understand that I may return the albums for any reason whatsoever and receive a full refund. (Make check or money order payable to Good Music Record Co. NY & NJ res. add sales tax.)

☐ Send 4 Records \$19.95 ☐ Send 3 Cassettes \$19.95 ☐ Send 2 Compact Discs \$24.95

(Enclose \$2.50 for mailing and handling per item.)

CHARGE IT! ☐ VISA ☐ MASTERCARD

Acct. No. _____ Exp. Date _____

Name _____

Address _____

City _____ State _____ Zip _____

© Good Music Record Co., Inc.



HAND COLORED QUARTER-PLATE DAGUERRETYPE, CIRCA 1845-1855 (ACTUAL SIZE APPROXIMATELY THREE BY FOUR INCHES)
COLLECTION OF ED HOLM.

150 YEARS OF
PHOTOGRAPHY
IN AMERICA

PHOTOGRAPHY: MIRROR OF THE PAST

By **ED HOLM**

Her steady, dignified gaze penetrates from her world to ours, bridging a gulf of perhaps 140 years. She and all of her generation and all of her children's generation and all of her grandchildren's generation are gone, reduced to bone and dust. The world she knew has vanished or been transformed beyond recognition. What she said and did, where she lived, whom she loved, the joys and sorrows she experienced, when she died—all have been forgotten. Even her name is lost. But the essence of one fleeting moment from this mid-nineteenth century woman's life survives intact, miraculously frozen in time and space by the most ephemeral of substances—photons of reflected light. The veins on the back of her hands, the delicate tracings of lace and ribbon in her bonnet, the crinkles in the fabric of her dress are all preserved for us to

observe just as they existed during a brief span of seconds several lifetimes ago. Trapped as in amber, they endure in a fragile, mirrorlike amalgam of silver and mercury on a copper plate, in a time machine called a daguerreotype.

Photography is magical. One of mankind's most astonishing and versatile discoveries, it is an art form, an avenue of communication and of personal expression, a scientific tool, a window into unseen and lost worlds. It can convey truth (and just as

effectively deceive), can reveal secrets of the past and present, inflame the emotions, touch the heart.

On the following pages we slip back in time to view this remarkable medium's formative decades in America, beginning 150 years ago this September, when photography was still new and miraculous to all who beheld and fell under the spell of its mysterious power.



SCENES OF "EXQUISITE PERFECTION"

Photography arrived in America on Friday afternoon, September 20, 1839.

That was the day the packet *British Queen* arrived in New York City following a transatlantic voyage. In addition to carrying passengers and cargo from Liverpool, the ship brought European newspapers and brochures describing the almost unbelievable new picture-making process perfected by French painter Louis Jacques Mandé Daguerre. Daguerre, an amateur scientist as well as an artist, had revealed the secrets of his remarkable process a month earlier at an August 19 meeting of the French Academy of Sciences.

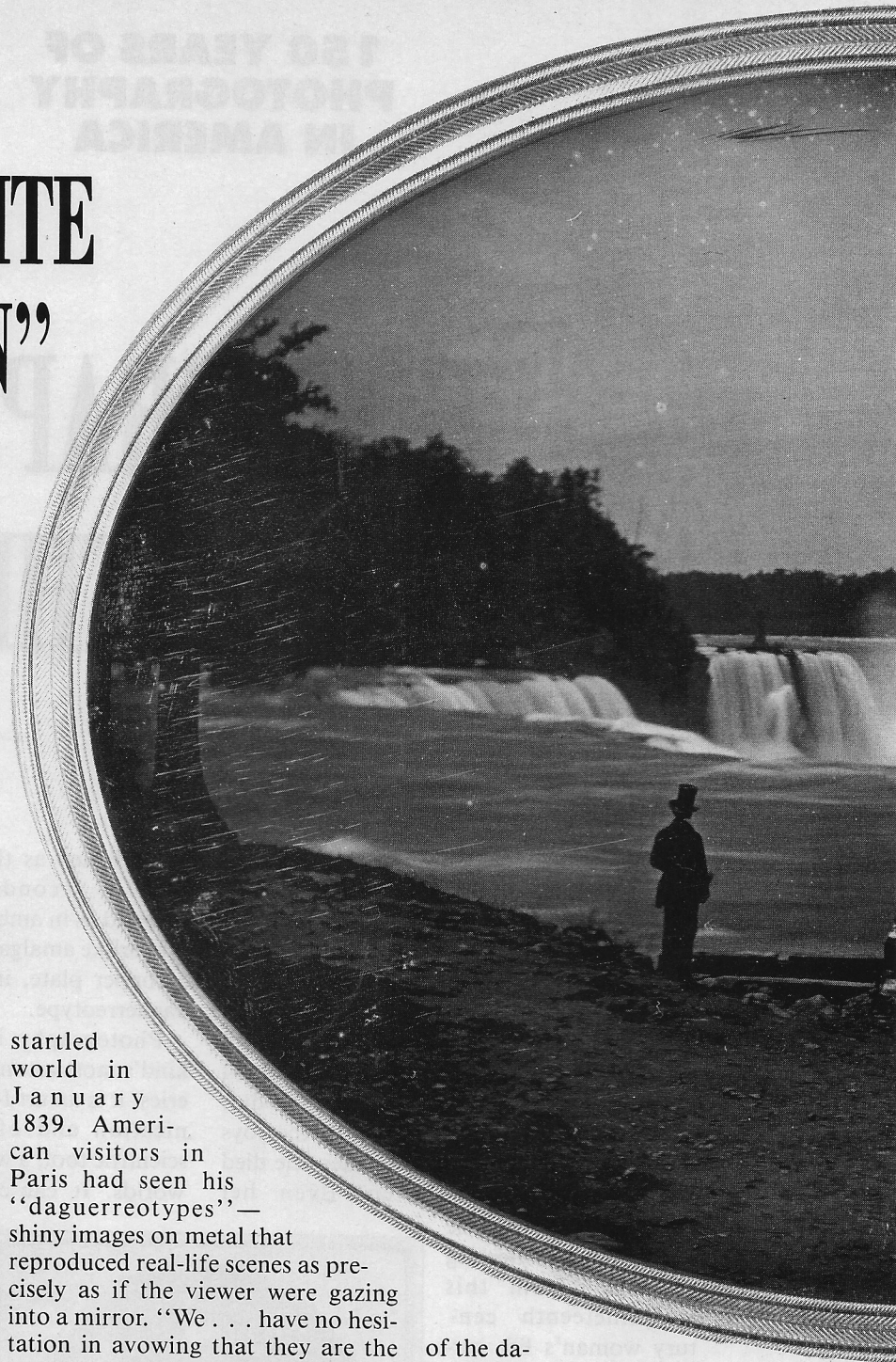
Americans had eagerly awaited for details of the invention since Daguerre announced his discovery to a

startled world in January 1839. American visitors in Paris had seen his "daguerreotypes"—shiny images on metal that reproduced real-life scenes as precisely as if the viewer were gazing into a mirror. "We . . . have no hesitation in avowing that they are the most remarkable objects of curiosity and admiration, in the arts, that we ever beheld," marveled the editor of *The Knickerbocker* magazine. "Their exquisite perfection almost transcends the bounds of sober belief."

American artist and inventor Samuel F.B. Morse, visiting Paris in March 1839 in connection with his telegraph, had even met Daguerre and privately viewed his pictures. "It is one of the most beautiful discoveries of the age," Morse wrote

of the daguerreotype: "... the delineation cannot be conceived. No painting or engraving ever approached it."

Within hours of the *British Queen's* arrival, New Yorkers were rushing to chemists' and instrument makers' shops, hastily assembling the components needed to duplicate Daguerre's discovery. Seven days later W.D. Seager, an Englishman living in New York, made what is believed to be the first American photograph—a view (now lost) of



The inventor in his invention: a daguerreotype of Daguerre.



Platt D. Babbit, a pioneer photographer of tourists at Niagara Falls, made the daguerreotype below in about 1855.



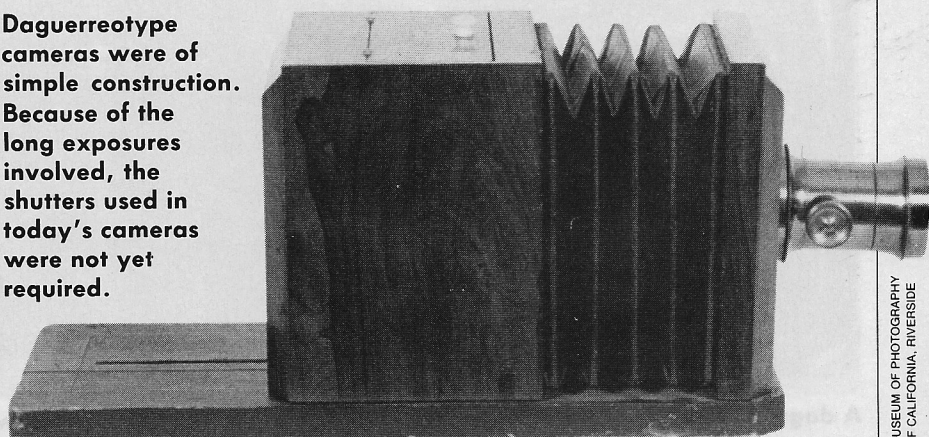
The oldest photograph of a human being: a self-portrait by Robert Cornelius (1839).



The oldest American daguerreotype: Philadelphia in 1839 by Joseph Saxton.

St. Paul's church in Manhattan. By the end of October Americans from Boston to Philadelphia were mastering the process. Among the first of these was Morse, who in turn instructed others as well as becoming one of the country's first portrait photographers. Although Morse's connection with the daguerreotype was as a pioneer user and advocate rather than as an inventor, his early involvement has led to him often being called "the father of American photography."

Daguerreotype cameras were of simple construction. Because of the long exposures involved, the shutters used in today's cameras were not yet required.

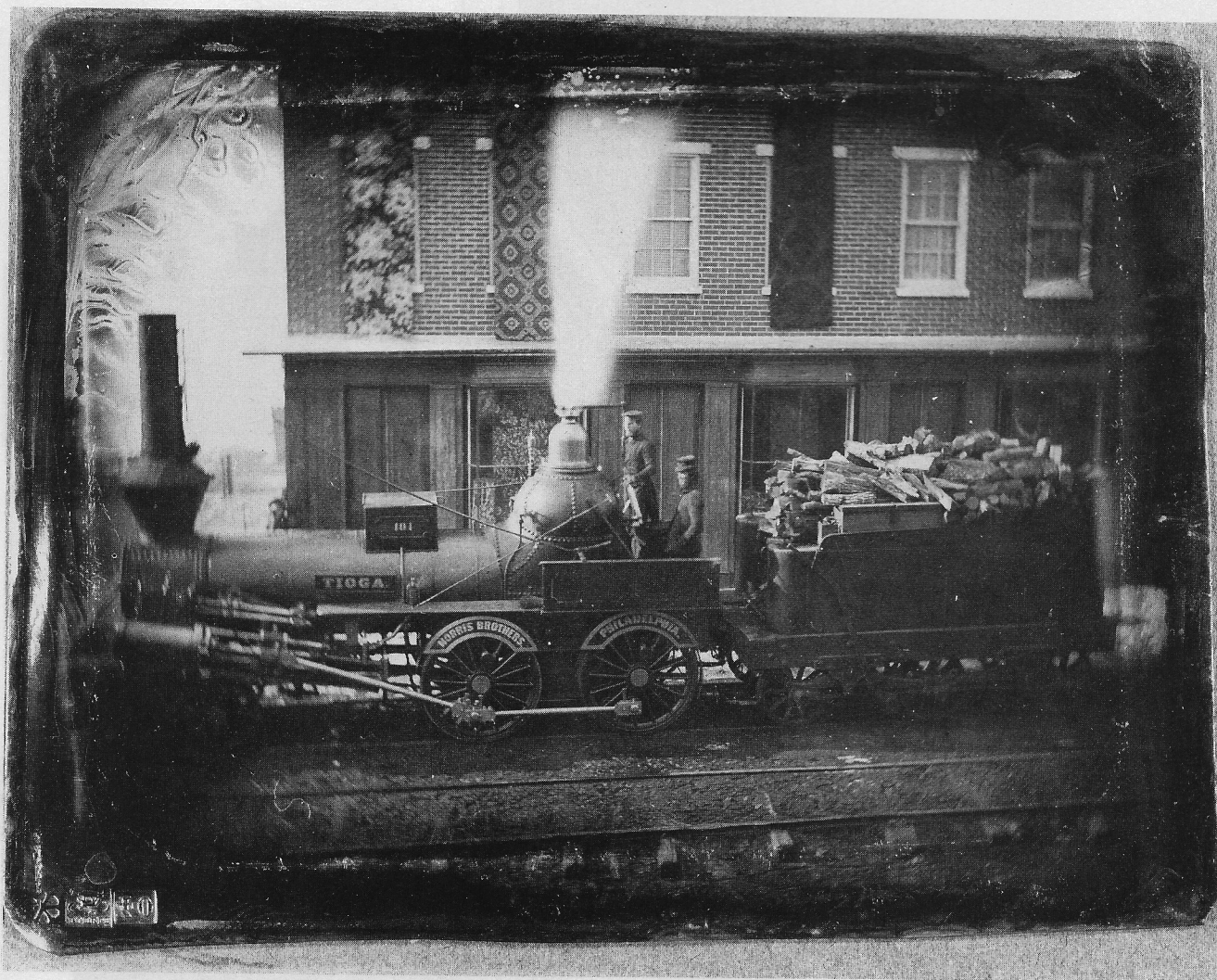


IMAGES IN QUICKSILVER

The daguerreotype combined new discoveries with scientific principles known for years. Artists had used the camera obscura—a box and lens combination that cast an image of the scene before it onto a sheet of glass—as a drawing aid since the seventeenth century. And scientists had long been aware that some substances, after being treated with certain chemicals, darkened



A daguerreotype within a daguerreotype (circa 1850).



A daguerreotype of the "Tioga"—perhaps the earliest photograph showing an American locomotive.

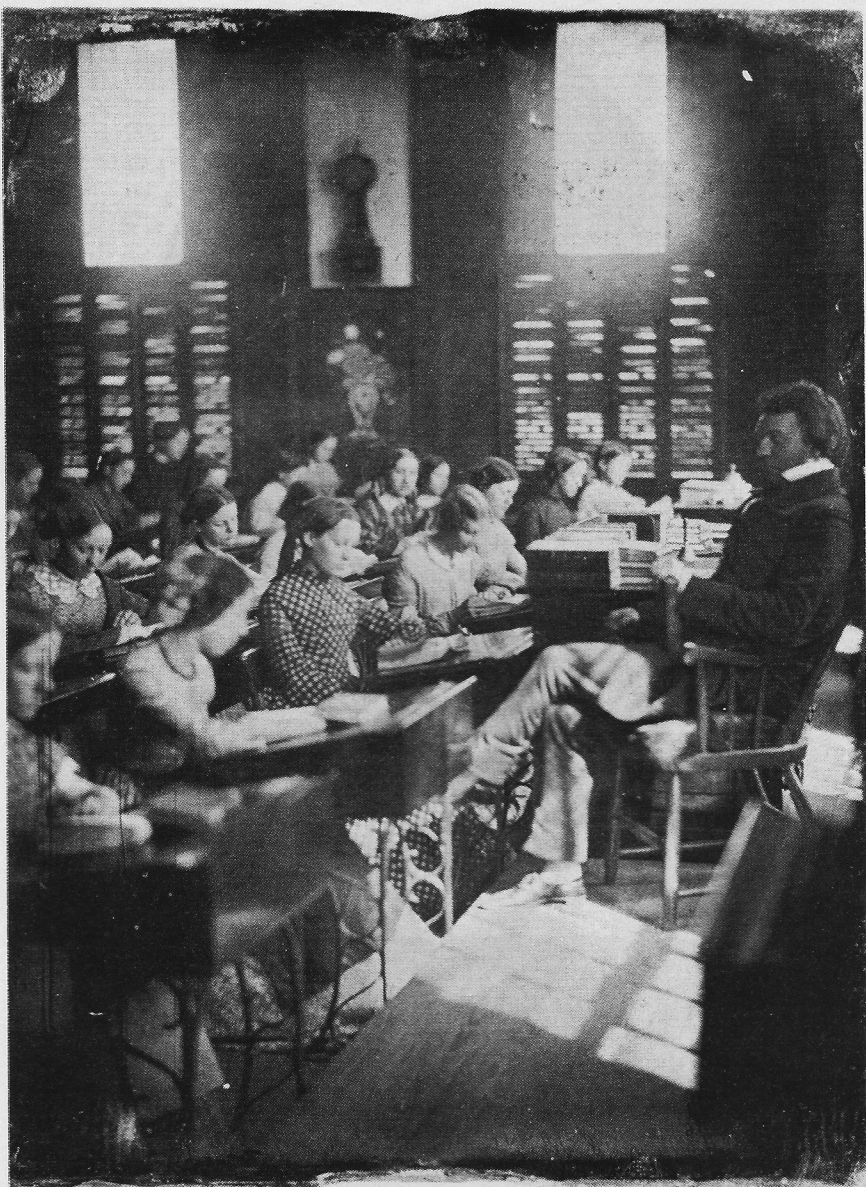
when exposed to light.

Although Daguerre was the first to devise a practical photographic process, another Frenchman—Joseph Nicéphore Niepce—had already created the world's first photographs. Niepce, who as a lithographer was familiar with light-sensitive compounds, succeeded in fixing camera-obscura images on sensitized pewter plates as early as 1826. But many hours of exposure were required to make his "heliographs" or "sun pictures."

Daguerre learned of Niepce's experiments, and in 1829 the two formed a partnership. The lithographer died four years later; Daguerre finally perfected his photographic process in 1837.

The procedure that Daguerre pioneered was exacting and, because of the substances used, somewhat hazardous. The daguerreotype itself was a silver-plated sheet of copper. Before use, the photographer sensitized the plate to light by exposing it to iodine vapors in a small box, creating a silver iodide compound on the polished silver. Placing the plate in the camera, he then made the exposure by removing the lens cap for between several minutes and half an hour. Then he returned the plate to another box where fumes from heated mercury developed the latent image, depositing a thin coating of quicksilver on those areas chemically transformed by exposure to light. Finally he "fixed" the image with a "hypo" solution and mounted the daguerreotype in a protective glass and metal frame.

The definition of daguerreotype images was limited only by the quality of the camera lens, and the pictures boasted a brilliance unmatched by any subsequent process. But daguerreotypes also had some serious limitations. The mirrorlike picture had to be viewed at a precise angle; otherwise reflected glare overwhelmed it. Also, daguerreotype images were reversed from left-to-right, a characteristic particularly bothersome in scenes showing signs and type. And unlike most processes used today, daguerreotypes could not be easily duplicated because no separate negative existed from which to produce additional pictures.



A "candid" daguerreotype by Albert Southworth and Josiah Hawes.



Glare overwhelms the daguerreotype's mirrorlike image if the picture is not held at precisely the correct viewing angle.



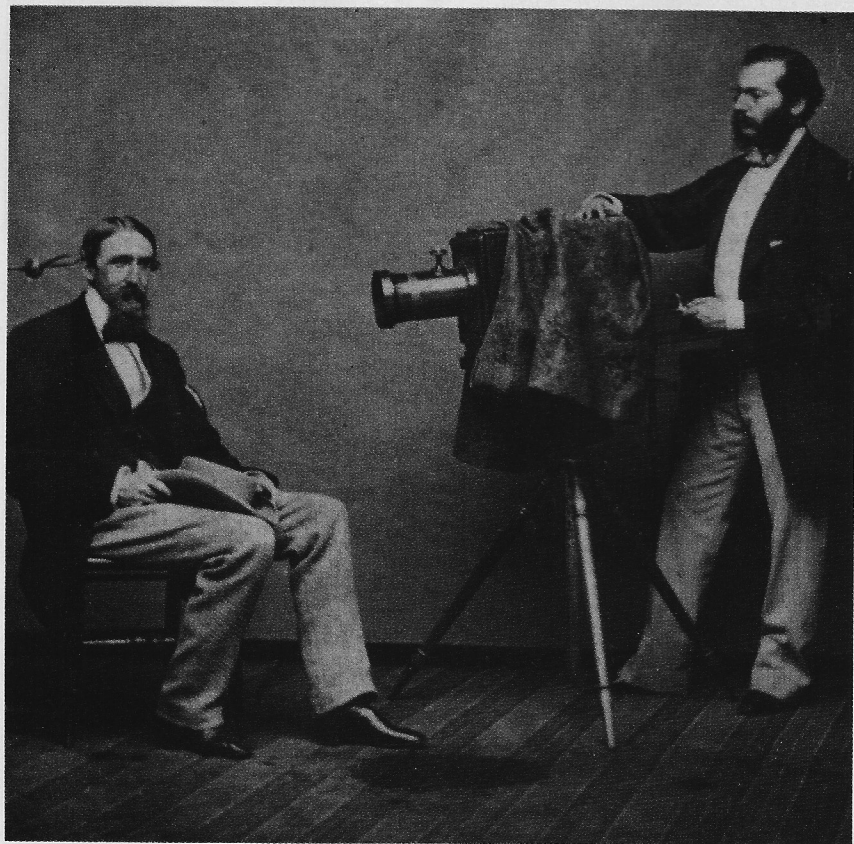
PORTRAITS BY THE MILLIONS

The first daguerreotypists were limited in their choice of subjects by the long exposure time—usually at least twenty minutes—needed to register an image on the silver-coated plate. Portraiture was next to impossible. But within two years after the daguerreotype was introduced to the United States a series of improvements radically reduced the necessary exposure times.

One breakthrough was the discovery that treating the unexposed daguerreotype plate with chlorine or bromine fumes greatly increased its sensitivity to light. Another significant advance was the introduction of new lenses with improved light-gathering power. In a well-lighted rooftop studio, an exposure time of as little as fifteen to twenty seconds soon became the norm.

Before the end of 1840, daguerreotype portrait galleries were in business in New York, Boston, and Philadelphia. By the middle of the decade nearly every eastern town of any size boasted at least one; New York City had more than seventy.

Daguerreotype portraits were available in several sizes, based on the standard whole “plate”—a copper and silver sheet measuring about 6½ by 8½ inches. Most customers chose quarter- or sixth-plate views; these were often tinted in lifelike colors by skilled artists. Such a likeness cost about two dollars, placing it beyond the reach of many Americans. But such was the enthusiasm for daguerreotypes among those who could afford them that by the mid-1850s galleries produced about three million portraits annually.



A rare early studio view showing a portrait photographer at work.



The identities of the men and women in these daguerreotypes are, unfortunately, no longer known.

THE AMERICAN LANDSCAPE



William Shew photographed this San Francisco street in 1852.

Portrait photographers were not the only ones who benefited from the technical innovations that soon improved the daguerreotype process. Those who attempted to make scenic photographs found that a minimum of five minutes was required to expose a plate, even in bright sunlight. But within a few years "instantaneous" views—with exposures of as little as a second—were attainable outdoors.

Although American photographers made thousands of outdoor pictures with the daguerreotype camera, surviving examples are relatively uncommon today. Such views

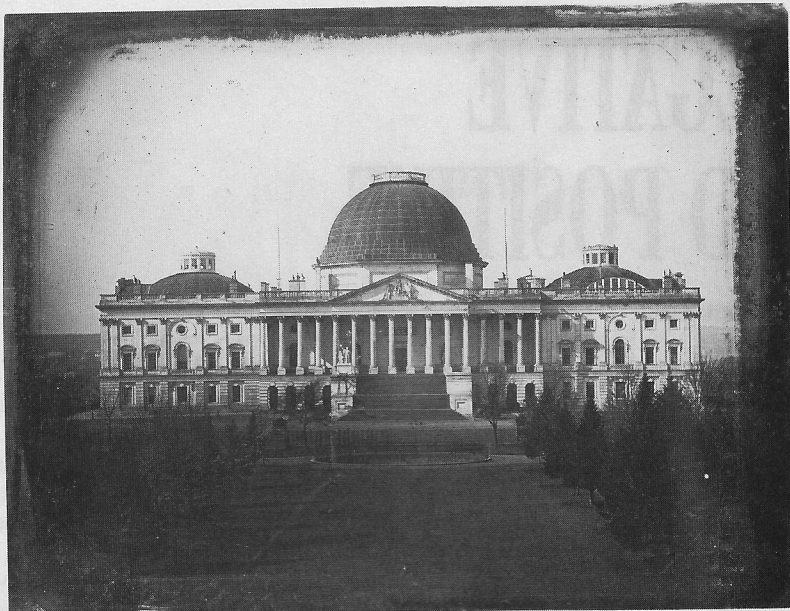
are valued by collectors for their rarity and by historians for what they reveal about mid-nineteenth-century life and culture. They are the earliest authentic pictorial documents of the American scene.

Unfortunately, the daguerreotype record of the American landscape is quite uneven. Numerous views of Niagara Falls, for example, have been preserved, while daguerreotypes showing New York City are almost nonexistent. Boston, Philadelphia, and Chicago are well documented, however, as are San Francisco and the California gold fields.



Some of the most interesting daguerreotype scenes are panoramas made up of several individual plates. Outstanding among these is an eight-picture series of the Cincinnati waterfront made in 1848 by Charles Fontayne and William Southgate Porter; two of the plates appear below. Other existing panoramas show Niagara Falls and San Francisco.

Long-lost views are continually coming to light: in 1972, for example, a daguerreotype (right) of the United States Capitol in Washington, D.C., previously known from lithographic copies, turned up at a California flea market. Made in 1846 by photographer John Plumbe, this picture is the oldest known photograph of the historic landmark. Many other significant daguerreotypes undoubtedly await discovery; among those that collectors and historians hope to find someday is a cache of three hundred California views by noted daguerreotypist Robert H. Vance, dating from 1849-50 and last seen in St. Louis in 1856.



An 1846 daguerreotype (above) by John Plumbe is the oldest known photograph of the U.S. Capitol.

In 1848 daguerreotypists Charles Fontayne and William Southgate Porter made a superb eight-plate panorama of Cincinnati, Ohio; two of the series appear below.



NEGATIVE AND POSITIVE

At about the same time that Louis Jacques Mandé Daguerre was perfecting the daguerreotype, a multi-talented Englishman named William Henry Fox Talbot (1800-1877) was independently devising his own method of painting pictures with light. Like Daguerre, Talbot used a camera obscura to focus images onto light-sensitive material. But Talbot sought to capture the images on chemically treated sheets of paper instead of metal. In August 1835, using a tiny camera and paper sensitized with silver nitrate, he succeeded in creating a translucent, postage-stamp-sized image of a library window at Lacock Abbey, his country home. It was the world's first photographic negative.

Although by January 1839 Talbot had not yet perfected his invention, that month's announcement of Daguerre's discovery prompted the Englishman to describe his own method of "photogenic drawing" before the Royal Society. Aided by Sir John Herschel, Talbot significantly improved his process over the next two years, reducing average exposure times from the half-hour first required to about thirty seconds. In 1844 he published *The Pencil of Nature*, the first book to be illustrated with a number of photographs.

Talbot called his pictures "calotypes" (from Greek for "beautiful") or "Talbotypes." To make a positive print, he placed a second sheet of chemically treated paper in contact with the paper negative and exposed both to sunlight. Natural imperfections in the translucent negative gave the pictures a softer, less distinct appearance than daguerreotype images. But Talbot's process had one great advantage: unlike the daguerreotype, which could not be

easily duplicated, the calotype negative could be used to produce a virtually unlimited number of prints.

Using Talbot's process, Scottish photographers Robert Adamson and David Octavius Hill achieved remarkable artistic results. And in France, an inventor named Hippolyte Bayard (1801-1887) produced beautiful paper photographs using his own formula. Bayard's pictures, though similar in appearance to calotypes, were direct positives made by a reversal process requiring no intermediate negative.

Despite its success in Europe, the calotype generated little enthusiasm among American photographers. Most preferred the sharper definition attainable with the daguerreotype, and because Talbot had patented his invention, licensing restrictions were a deterrent. Nevertheless, the calotype held great significance for the future of photography around the world: the negative/positive process it pioneered laid the foundation for most of the systems employed today.

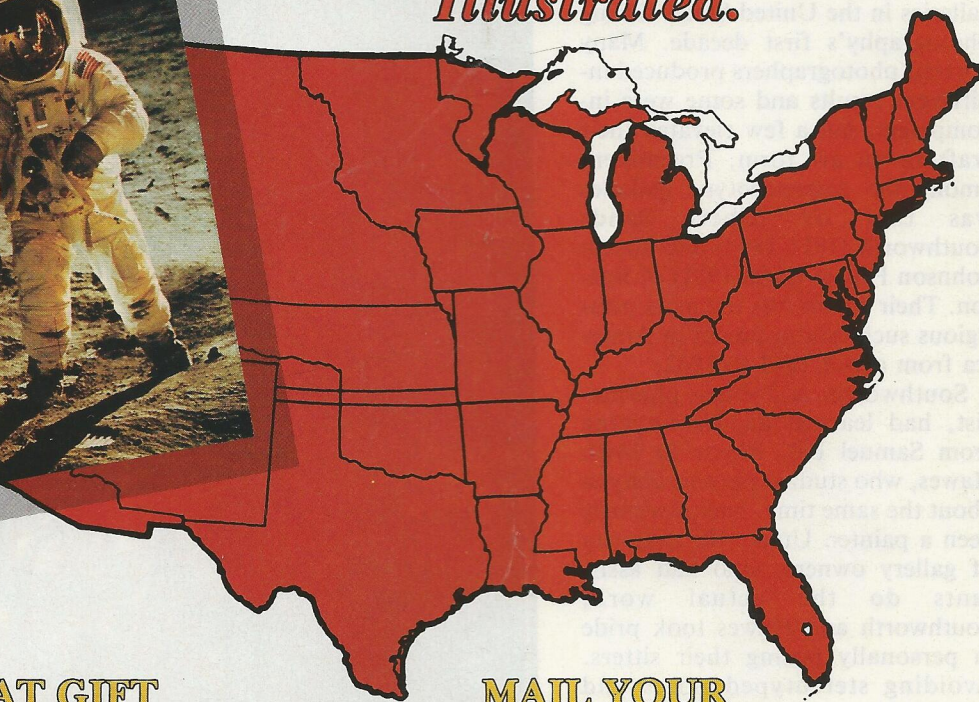
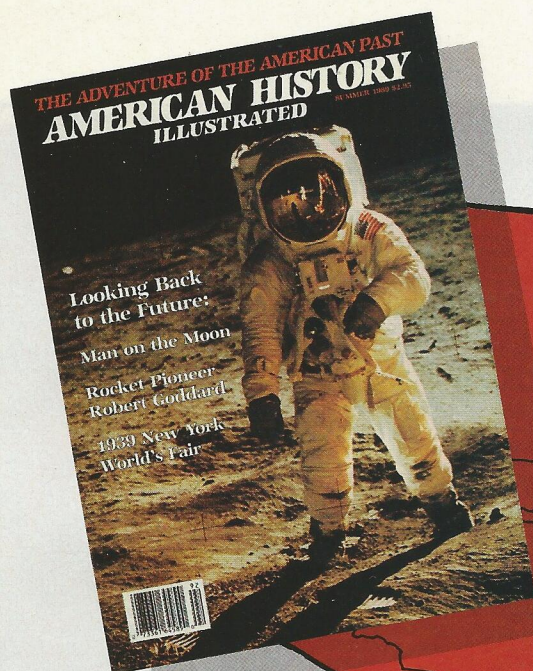


Philadelphia photographers William and Frederick Langenheim made this calotype view of the city's Merchant's Exchange in 1849.

Give a Gift of America's History This Christmas . . .

. . . with a one-year
gift subscription to

AMERICAN HISTORY
Illustrated.



**GREAT GIFT
FOR HISTORY LOVERS!**

Those you know who share your love of history will find **AMERICAN HISTORY Illustrated** as enjoyable as you do, and will remember your thoughtfulness with each of the 6 issues they receive and use as a reference guide for many years to come.

**MAIL YOUR
GIFT LIST NOW!**

Distinctive, yet inexpensive, a one-year subscription is \$20; each additional gift (or your own renewal) is only \$18.

To order, use the attached postpaid envelope. If it is missing, write to: **AMERICAN HISTORY Illustrated**/Gift Department/P.O. Box 1776/Mt. Morris, IL 61054.

— THEN LEAVE EVERYTHING TO US! —

For each gift ordered, we'll send you a handsome card when acknowledging your order. Use it to announce your gift when and how you choose. (New gifts begin with the January issue, unless you specify otherwise. Renewals are extended, not duplicated.) We'll even defer billing until after January 1, if you prefer.

ORDER NOW WHILE SPECIAL



CHRISTMAS GIFT RATES LAST!

OFFER EXPIRES 12/31/89.

MASTERS OF THE DAGUERRETYPE

Perhaps one thousand daguerreotypists maintained portrait galleries in the United States during photography's first decade. Many portrait photographers produced indifferent results and some were incompetent, but a few elevated their craft to an art form. Preeminent among the daguerreotype galleries was that of Albert Sands Southworth (1811-1894) and Josiah Johnson Hawes (1808-1901) of Boston. Their studio was the most prestigious such establishment in America from about 1843 to 1862.

Southworth, a former pharmacist, had learned daguerreotyping from Samuel F.B. Morse in 1840; Hawes, who studied photography at about the same time, had previously been a painter. Unlike the majority of gallery owners, who had assistants do the actual work, Southworth and Hawes took pride in personally posing their sitters. Avoiding stereotyped poses and lighting, they were unequalled in their ability to capture the essence and vigor of their subjects. "The artist, even in photography," noted Southworth, "must go beyond discovery and knowledge of facts; he must create and invent truths. . . . He should not only be familiar with nature and her philosophy, but he should be informed as to the principles which govern or influence human actions, and the causes which affect and mark human character."

Southworth and Hawes's clientele included such luminaries as John Quincy Adams, Zachary Taylor, Daniel Webster, Harriet Beecher Stowe, Ralph Waldo Emerson, and Henry Wadsworth Longfellow. At a time when other galleries charged two dollars for a portrait, they were able to command more than twice as much.

Emerging as artists of the first

rank at nearly the inception of photography, Southworth and Hawes have been matched by few portrait photographers since and surpassed by none. Their legacy of 1,500 images, including studies of many of mid-nineteenth-century America's leading political, social, and artistic figures, is the largest and finest such group of daguerreotypes to survive.

These whole-plate daguerreotypes of now-unknown subjects are typical of the superb portraits made by Boston photographers Albert Sands Southworth and Josiah Johnson Hawes.



BOTH PAGES: INTERNATIONAL MUSEUM OF PHOTOGRAPHY AT GEORGE EASTMAN HOUSE





FORESHADOWING PHOTOGRAPHY'S FUTURE

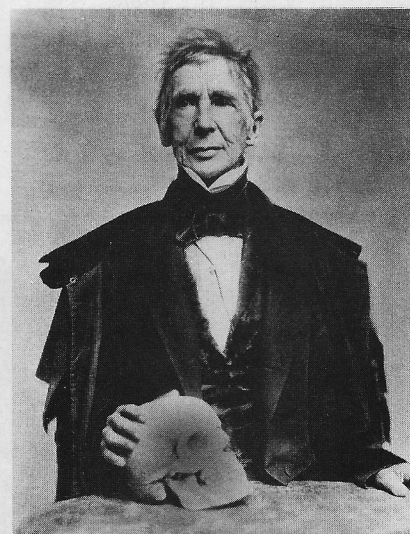
The first photographs were straightforward scenic views and portraits. But inventive photographers soon began to find new uses for the camera. Some surviving daguerreotypes, for example, contain scenes foreshadowing the future field of photojournalism. In Pawtucket, Rhode Island, a now-unknown photographer recorded the spectacular aftermath (above) of an August 12, 1853 head-on collision on the Providence and Worcester Railroad. Other news-oriented daguerreotypes dating from the same year include a view of a burning mill in Oswego, New York, and one showing a doomed boatman stranded in midstream above Niagara Falls. Because almost half a century more would pass before introduction of the half-tone printing process, early journal-



An 1853 daguerreotype of a train wreck near Pawtucket, Rhode Island (opposite) was among the first news-oriented photographs.

An unknown daguerreotypist made the first war views in Saltillo, Mexico (left) during the Mexican War of 1846-47.

John Collins Warren (below) and other physicians at Boston's Massachusetts General Hospital pioneered in medical applications for photography, recording abnormal physical conditions as well as some of the first operations using ether (below left).



istic use of photographs was limited to their employment as guides for artists making woodcut illustrations.

Saltillo, Mexico provided the setting for the first war photographs when an anonymous cameraman made a half-dozen daguerreotypes showing American troops occupying that town during the Mexican

War. The pictures show no action; one typical scene made during the winter of 1846-47 portrays General John Ellis Wool and his staff (top).

Physicians at the Massachusetts General Hospital in Boston were among the first to recognize that photography had potential scientific applications. During the mid-1840s surgeon John Collins Warren (above

right) and other doctors employed daguerreotypists to make visual records of patients afflicted with tumors and other disorders as well as to document the results of corrective surgery. A view made in the hospital's surgical amphitheater (above left) documents one of the first occasions on which ether was employed as an anesthetic.

GUNCOTTON AND ETHER

Photographers familiar with William Henry Fox Talbot's calotype process—and with the limitations of the paper negative—realized that a transparent material like glass could provide a superior base for light-sensitive emulsions. But finding a reliable method of bonding an emulsion to glass eluded researchers until Englishman Frederick Scott Archer (1813-1857) introduced the collodian, or “wet plate” process, in 1851.

Wet plate photography proved more versatile and practical than any method before it. Its most significant advantage was that any number of high-quality paper prints could be made from a single glass negative. The collodian process became the predominant means of picture-making during the late 1850s and reigned supreme until the widespread adoption of “dry plate” emulsions during the 1880s.

The procedure for picture-taking with a wet-plate outfit required considerable patience and skill. The

photographer set up his heavy view camera on a tripod, composing and focusing the scene on the ground-glass back with the aid of a dark-cloth. If he was away from his studio, he also erected a small tent for use as a makeshift darkroom. Some professionals traveled with permanent darkrooms on horse-drawn wagons.

Working in the dim light and chemical-laden atmosphere of the dark-tent, the photographer carefully poured a solution of collodian—a syrupy mixture of guncotton (cellulose nitrate), alcohol, and ether—onto the glass sheet, allowed this bonding agent to dry just enough to form a thin film, and then sensitized the emulsion by immersing the plate in a bath of silver nitrate. He then fitted the plate into a light-tight holder, placed it in the camera, and made his exposure, usually by removing a cap from the lens. The exposure of several seconds was an estimate based on the photographer's past experience with

lighting conditions.

The cameraman immediately returned the exposed plate to his dark-tent, developed it in a bath of pyrogalllic acid, and rinsed it in clean water. He then immersed the negative in a hypo bath to remove undissolved silver salts, again rinsed it in water, dried it over a candle flame, and finally applied a protective coating of varnish.

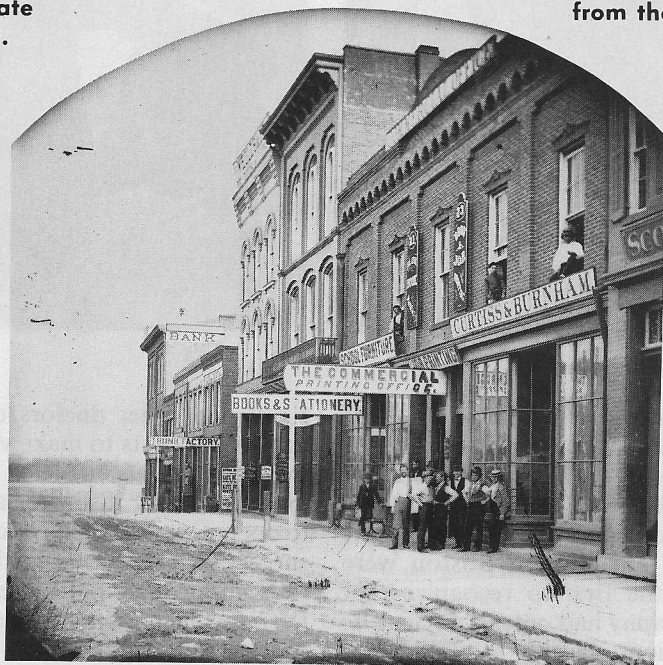
The term “wet plate” derived from the requirement that the photographer expose and develop the negative soon after sensitizing it. As soon as the emulsion dried (a period that varied from a few minutes to about half an hour, depending upon the temperature and humidity), the negative lost most of its sensitivity to light and became useless.

The wet plate process had significant drawbacks—including the inconvenient necessity of transporting boxes of heavy glass plates, noxious chemicals, and a portable darkroom to wherever one wanted to obtain a photograph. However, it made excellent pictures. The stable base provided by the glass plate, the collodian emulsion's fine grain, and the fact that the camera was invariably mounted on a tripod all contributed to creating extremely sharp images.

The illustration at left is an actual-size reproduction of half of a wet-plate stereograph made in Leavenworth, Kansas in 1867. It is one of thousands of such images preserved by Chicago photographer and collector David R. Phillips, who, using modern-day photographic technology, extracts remarkable amounts of detail from the plates. The full-page illustration opposite, enlarged from a segment of the one at left, reveals a group of printing company employees assembled outside of their Delaware Street office.

Below: Kansas in 1867—a contact print from a wet plate negative.

Opposite: a segment (enlarged about ten times) from the image below.



SCHOOL FURNITURE.

FOR PRINTING

COMMERCIAL
PRINTING OFFICE.

ERY.

SCHOOL BOOKS

DAILY
COMMERCIAL
PRINTING
ROOM.



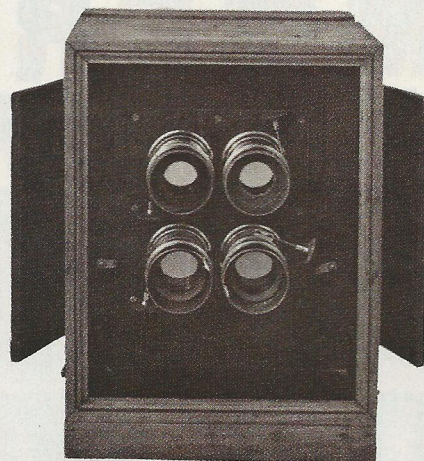
CARTES DE VISITE

In 1854 Frenchman Adolphe Eugène Disdéri patented a four-lensed portrait camera capable of producing multiple images on a single glass plate negative. With this camera a studio photographer could provide sitters with prints of a number of identical or different poses at a far lower cost than if he used separate negatives.

The advent of the *carte de visite*, as the visiting-card-sized paper print was generally called in the United States and Europe, revolutionized the commercial portrait industry. For the first time ordinary people could afford photographic likenesses in quantity not only for themselves but to give to family and friends. A near-mania for card photographs developed during the early 1860s, with hundreds of studios turning out millions of images. For more than a decade the *carte de visite* remained the most popular type of photograph in America.

The now-ubiquitous photograph album was a direct outgrowth of the fad, as manufacturers introduced ornate albums with slotted window openings in the pages for displaying the quantities of cards that every family accumulated. Enthusiasts collected not only pictures of ac-

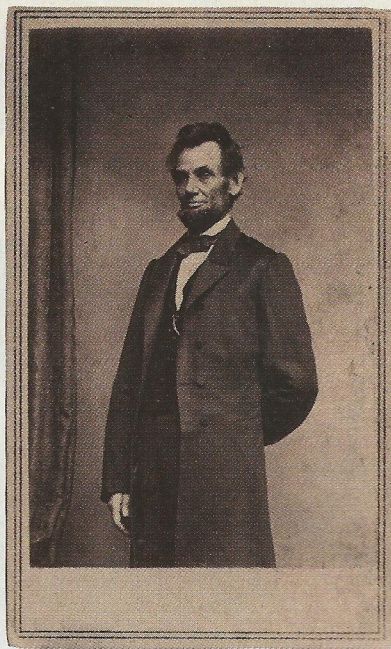
quaintances, but purchased card photos of public figures and celebrities. *Carte de visite* portraits of royalty, in fact, were directly responsible for igniting interest in card photographs. Attention had been first drawn to Disdéri's innovation in 1859 when Napoleon III halted his army, enroute to Italy, outside the photographer's studio while he had his portrait made. International interest blossomed the following year when American photographer J.E. Mayall published a collection of *carte de visite* photographs of England's Queen Victoria and the royal family.



When used with a movable plate-holder, the four-lens carte de visite camera above could register as many as eight separate images on a single negative. The small album at right holds a single card photograph on each page; larger ones usually contained four per page.



INTERNATIONAL MUSEUM OF PHOTOGRAPHY AT GEORGE EASTMAN HOUSE



COLLECTION OF ED HOLM



NATIONAL MUSEUM OF AMERICAN HISTORY, SMITHSONIAN INSTITUTION



NATIONAL MUSEUM OF AMERICAN HISTORY, SMITHSONIAN INSTITUTION



COLLECTION OF ED HOLM



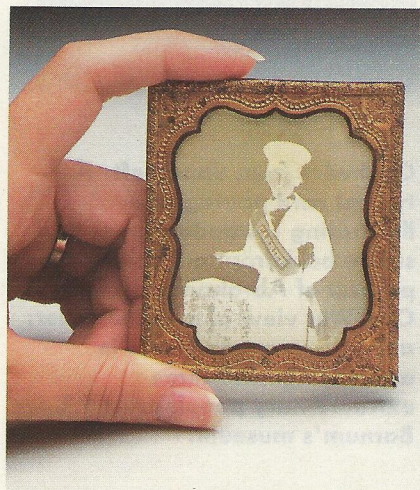
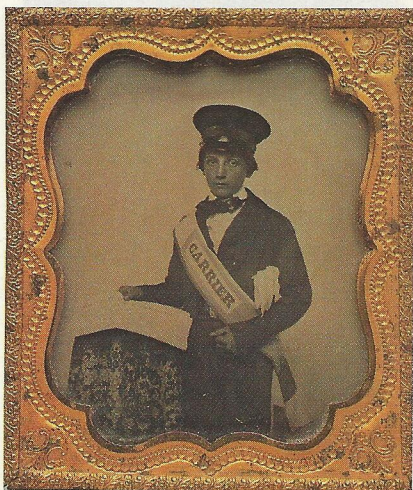
Clockwise from upper left: A typical card photograph illustrating a standard pose and studio backdrop; a Mathew Brady portrait of Abraham Lincoln; a Civil War view of a Union sailor; an early example of sex in advertising; and three extraordinary people from P.T. Barnum's museum.



THE AMBROTYPE

By the mid-1850s the daguerreotype portrait began to lose favor not only to collodian wet-plate images printed on paper but to other, more economical methods of photography. One of these, introduced to America from England in 1854 and known as the ambrotype (a word derived from the Greek “ambrotos,” signifying “immortal”), was a variation of the collodian wet-plate process.

The ambrotype was essentially an underexposed collodian negative on a sheet of glass. When viewed in front of a white background, the newly exposed and developed plate



COLLECTION OF ED HOLM; COPY PHOTOGRAPHS BY BRIAN HUNT



When an ambrotype's black backing—usually varnish or velvet cloth—is removed (opposite), the picture's true identity as a glass negative is revealed.

presented a conventional negative image. But when the glass was backed by a piece of black velvet or with dark varnish, all of the tonal values in the picture instantly reversed and a positive image appeared. To protect the emulsion, a second piece of glass was usually sandwiched against the first with balsam glue; the photograph was

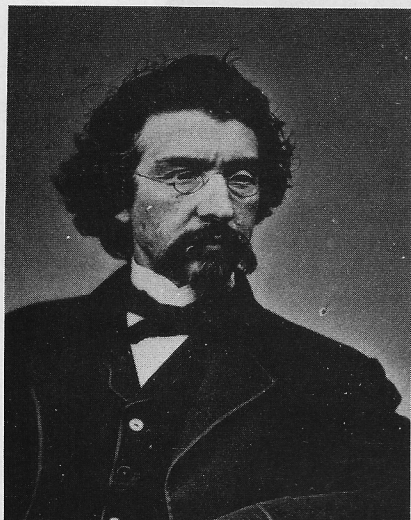
then mounted in a brass frame and fiber decorative case similar to those used for daguerreotypes.

Like the daguerreotype, the ambrotype was a one-of-a-kind image; because the negative itself formed the finished picture, additional copies could not be made. Ambrotype pictures lacked the visual brilliance and contrast of the daguerreotype,

but at the same time viewers were spared the glare inherent in the older process. Probably the chief attraction of the ambrotype was its low cost—a fraction of that of a daguerreotype. With a portrait available for as little as a quarter, the ambrotype brought possession of a photographic likeness within reach of the average citizen.

PHOTOGRAPH BY BRADY

NATIONAL MUSEUM OF AMERICAN HISTORY, SMITHSONIAN INSTITUTION



Among those who received instruction on making daguerreotypes from Samuel F.B. Morse in 1840 was a nearsighted but energetic young artist named Mathew B. Brady. Brady soon abandoned painting in favor of photography and in 1844 opened a daguerreotype studio in New York City.

Brady (1823-1896) proved to be a consummate portraitist as well as a skillful entrepreneur, and leading actors, scientists, writers, and other celebrities (including visiting European royalty) flocked to his gallery. His success dictated successive moves to larger and more lavish quarters, and in 1858 Brady opened

a branch studio in Washington, D.C., where his work had already attained great popularity among politicians and statesmen. By this time he stood unchallenged as the most renowned and successful portrait photographer in America.

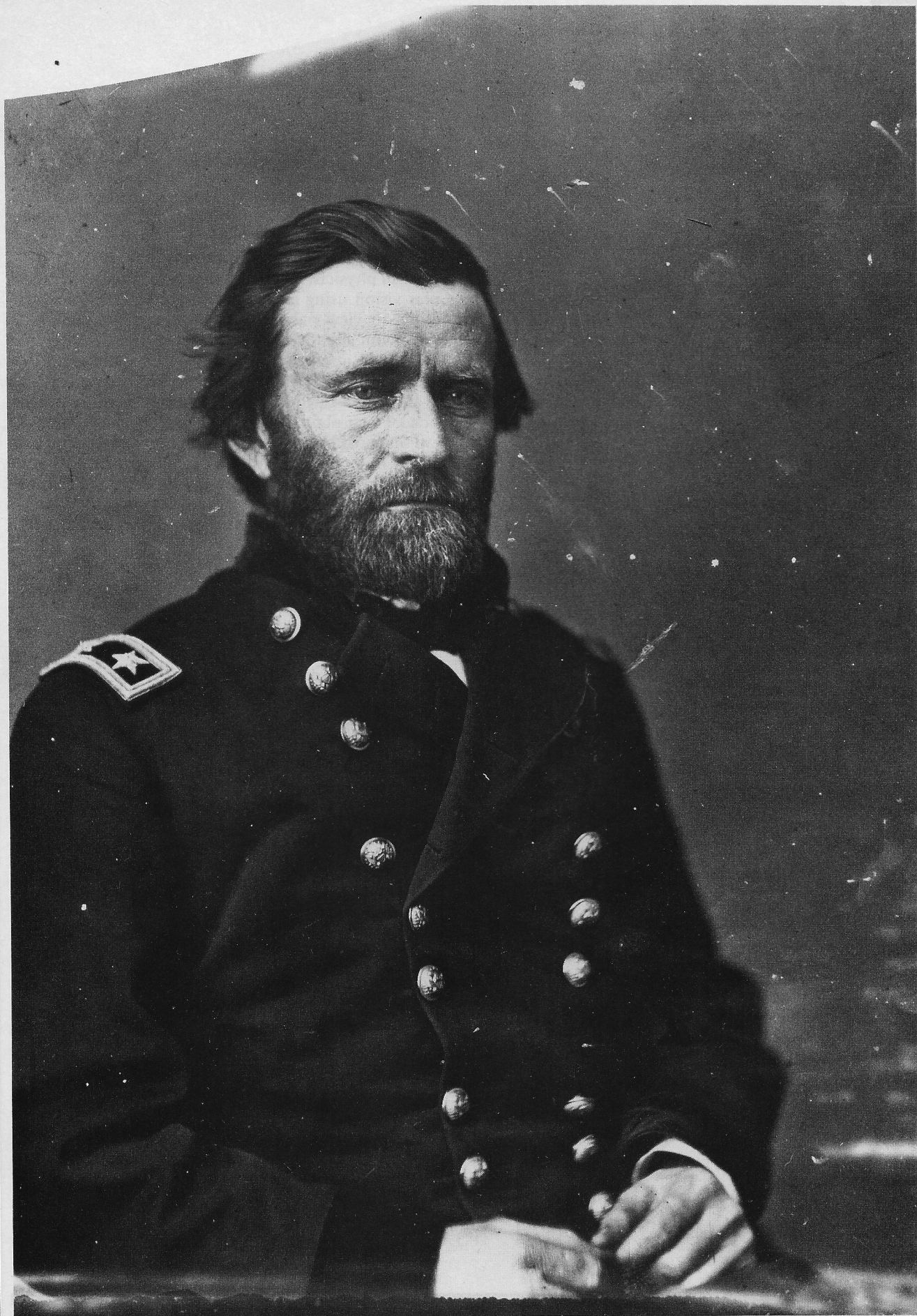
Brady embraced the latest technical innovations—including the *carte de visite* and collodian processes—as they were introduced. Wet-plate images from his gallery (three appear on these pages) rank among the best studio portraits ever made.

Brady's weak eyesight failed more with each passing year, and he soon turned over most actual camera work to skilled assistants. Simultaneously his inner vision of photography's—and his own—roles in history grew more sharply defined. As early as 1845 Brady instituted a deliberate program of assembling portraits of all of the notable figures of his day, and in 1850 he published the first of a projected series of portfolios picturing illustrious Americans. Brady succeeded in portraying nearly every president and ex-president of the era, and the words "Photograph by Brady" became the most esteemed credit line in America. In 1862 Abraham Lincoln paid the photographer the ultimate compliment. Referring to a Brady portrait of Lincoln that had been widely circulated when the country lawyer first achieved national attention, he noted that "Brady and the Cooper Union speech made me President of the United States."

Portraits from the Brady Studio:
Brady himself (upper left), Samuel F.B. Morse (left), and General Ulysses S. Grant.



LIBRARY OF CONGRESS



THE THIRD DIMENSION



With twin lenses mounted about two and one-half inches apart, stereo cameras made two nearly identical images on a single negative.

Creating an illusion of depth in pictures was attempted even before the invention of photography. The principle that the brain visualizes the third dimension by combining and interpreting the different images seen by the left and right eyes was well understood by early nineteenth-century scientists. In 1832 English physicist Charles Wheatstone simulated binocular vision using an optical device he called a stereoscope to view pairs of drawings showing objects as seen from slightly varying angles.

In 1849 another Englishman, David Brewster, applied Wheatstone's concept to photography. The results were startling. "The magic result of the resolution of two plain pictures into one, possessing to the eye the most positive solidity, is so striking," noted an early observer, "that it appears to be a deception of the senses." Scenes that appeared flat and uninteresting as simple photographs assumed an uncanny sense of reality when pictured and viewed in stereo.

Stereo photography achieved great popularity in England and Europe, and by the late 1850s it took hold in the United States. Physician and essayist Oliver Wendell Holmes was America's leading booster of the process, praising it in magazine articles, coining the name "stereograph" for stereo cards, and inventing a simple hand-held viewer that eventually became a fixture in almost every family parlor. Manufacturers such as E. & H.T. Anthony, Underwood & Underwood, and the Keystone View Company sold tens of millions of stereographs and sent corps of photographers around the world in search of natural and manmade wonders for their files.

During an era when few people had the opportunity to travel far from home and when publications did not yet contain halftone illustrations, the stereoscope provided millions of armchair travelers with countless hours of entertainment and their first real look at the world beyond their horizon. More than a passing fad, stereo photography retained its popularity until well after the turn of the century.

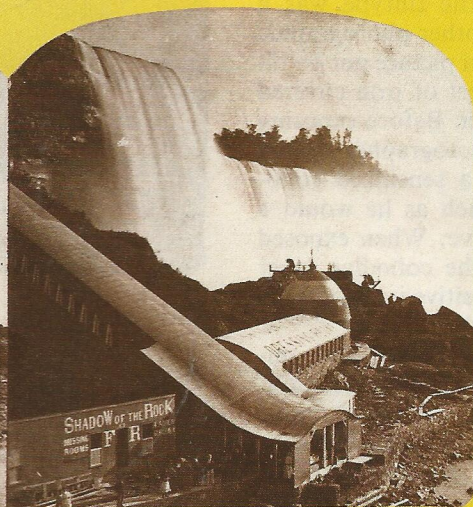
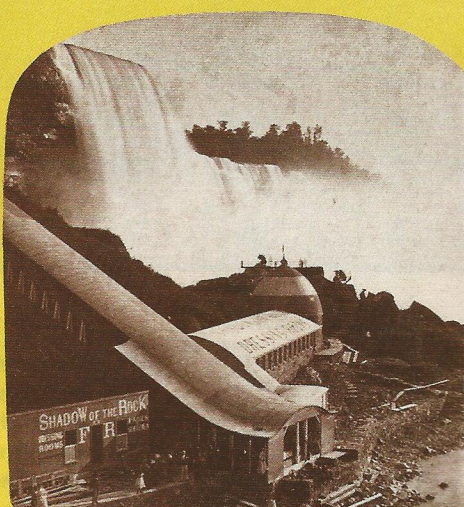
Gierstadt Bros. Photographers.



New Bedford, Mass.

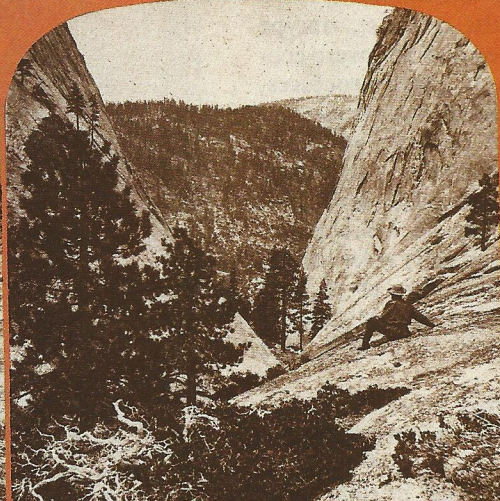
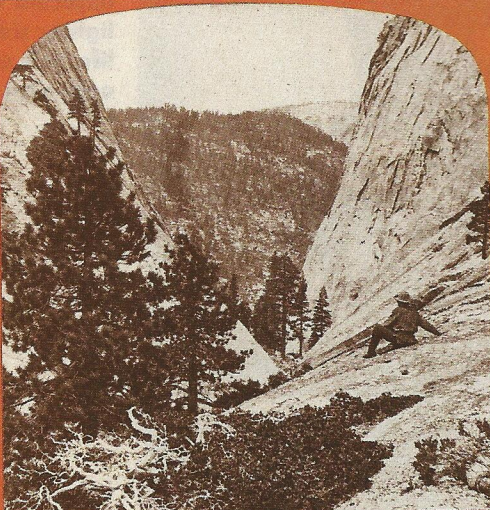
400 State Street, Boston, Mass.

NEW YORK
NICKEL
TRADE
MARK
STEREOPHOTOGRAPH
COMPANY



NEW YORK
NICKEL
TRADE
MARK
STEREOPHOTOGRAPH
COMPANY

YO-SEMITE VALLEY.



THOMAS HOUSEWORTH & Co.,
SAN FRANCISCO

1617. LOOKING DOWN THE TRAIL, from the Cap of Liberty.

Typical stereo views: State Street in Boston, Niagara Falls, and California's Yosemite Valley.

THE HUMBLE TINTYPE

In 1856 Hamilton Smith, an Ohio college chemistry and physics professor, patented a new type of photograph he called the "melainotype." Later the process would be better known under two other names—"ferrotype" and "tintype."

In principle, the tintype was a blend of several other photographic processes. It was a picture not on tin but on a thin sheet of iron covered with black lacquer. Before exposing the plate, the photographer coated its surface with a sensitized collodian solution much as he would a glass-plate negative. When exposed and developed, the collodian layer registered as a positive image on the black background.

Like the daguerreotype and ambrotype, the tintype was a one-of-a-kind picture that could not be reproduced in quantity as could an image on a glass-plate negative. Tintype photographers got around this limitation, however, by using multi-lens cameras, registering as many as thirty-six images on a single plate.

Possessing little contrast, tintype pictures appeared dull and were generally inferior to other processes. But they were cheap, the prints were durable, and a portrait could be ready for the customer in minutes. Ordinary people loved them. A visit to a high-class studio for a paper photograph was usually reserved for a special occasion, but at six pictures for a quarter, almost any excuse was adequate for a stop at a tintype gallery.

Outlasting most other early processes, the tintype retained its popularity through the end of the century. Catching people in their most relaxed and happy moods, surviving tintypes provide us with some of nineteenth-century America's most charming images.



Inexpensive ferrotype portraits were within reach of even the most humble of citizens (above). Many tintypes depicted the lighter side of life (left and opposite).



THE FACE OF WAR

This Confederate soldier, who fell at Petersburg in April 1865, was among the Civil War's last casualties.

\$100,000 in the endeavor.

Working under difficult conditions—usually within range of enemy rifle and cannon shot—the photographers made thousands of exposures on their stereo and view cameras, developing the negatives in portable darkrooms the troops dubbed “What Is It?” wagons. The pictures—many of the best of them taken by Brady assistants Alexander

INTERNATIONAL MUSEUM OF PHOTOGRAPHY AT GEORGE EASTMAN HOUSE



Let him who wishes to know what war is,” wrote Oliver Wendell Holmes of photographs showing the Antietam battlefield, “look at this series of illustrations.” During the Civil War, such pictures carried visual evidence of the horrors of combat into American homes for the first time.

Mathew B. Brady, the photographer most closely associated with the Civil War, actually took few of the pictures. His more significant contribution was foreseeing the importance of compiling a pictorial record and actually undertaking and overseeing to completion such a project.

In July 1861 Brady did attempt to personally cover the battle of Bull Run. But instead of photographing a glorious Union victory, he found his wagon caught in a confused retreat: “We . . . expected to be in Richmond next day,” he recalled thirty years later, “but it was not so, and our apparatus was a good deal

damaged on the way back to Washington.”

Thereafter Brady hired other men to do most of his picture-taking. During the course of the next four years as many as twenty Brady photographers were continuously in the field, and Brady invested more than

Gardner and Timothy O’Sullivan—carried the war to civilians with an immediacy never before experienced. The collodian plates were too slow to capture the action of battle, but short exposures were not needed to picture the rows of bloated corpses that littered the fields after each encounter.

In 1866 Alexander Gardner published a *Photographic Sketch Book* of war views. It was not a success. Brady himself met financial disaster, losing everything including his precious negatives, because people wanted to forget, not remember.

“It is so nearly like visiting the battlefields to look over these views,” wrote Holmes, “that all the emotions excited by the actual sight of the stained and sordid scene, strewn with rags and wrecks, came back to us, and we buried them in the recesses of our cabinet as we would have buried the mutilated remains of the dead they too vividly represented.”



A Union cavalryman, circa 1861.

COURTESY OF HERB PECK, JR.



One of the war's rare candid views, made by Timothy O'Sullivan, catches Union general Ulysses S. Grant (seated on church pew near trees) writing a dispatch at Massaponax Church, Virginia, in May 1864.

EXPLORING THE FRONTIER

Soon after photography arrived in America, the camera began to accompany some of the earliest government expeditions to survey the vast tracts of prairie, mountains, and desert stretching from the Mississippi River to the Pacific Ocean. Expedition leader John C. Frémont carried a daguerreotype outfit when he mapped the Oregon Trail in 1842, but his lack of experience in its use resulted in failure. In 1853 Frémont tried again, employing a daguerreo-

typist on an expedition across the Rocky Mountains. Another daguerreotypist accompanied Isaac Stevens when his party surveyed a route to the Pacific Northwest the same year. Both photographers obtained pictures, but their work is now lost.

The period following the Civil War marked the apex of expedition photography. Some of the best frontier photographers were men who had learned their craft during the

war. Outstanding among these was Timothy O'Sullivan (1840-82), former assistant to Mathew Brady. Between 1867 and 1875 O'Sullivan accompanied or led several expeditions to the West, including one under Clarence King along the fortieth parallel and others under Lieutenant George M. Wheeler to the Southwest. O'Sullivan obtained superb views of desert scenes, the Colorado River, and Indian ruins.

Equaling O'Sullivan in talent and perseverance was William H. Jackson (1843-1942), the longest-lived and probably the greatest of America's frontier photographers. As official photographer for the U.S. Geological Survey during 1870-79, Jackson accompanied a series of expeditions to the Rocky Mountains. His pictures of Yellowstone's wonders in 1878 were influential in leading Congress to establish a national park there.

Often working with giant 20- by 24-inch wet plate cameras and equipment that required entire mule trains to carry, Jackson and O'Sullivan repeatedly surmounted some of the most difficult working conditions ever to face American photographers.

On the West Coast, meanwhile, several commercial photographers obtained significant artistic views of natural wonders in California, the Oregon Country, and Alaska. Notable among these were Eadweard Muybridge (1830-1904), better remembered today for his photographic studies of motion, and Carleton E. Watkins (1829-1916), celebrated for his mammoth-plate views of the Yosemite Valley.

William Henry Jackson
photographed Yellowstone (left);
Timothy O'Sullivan the Southwest
(right).





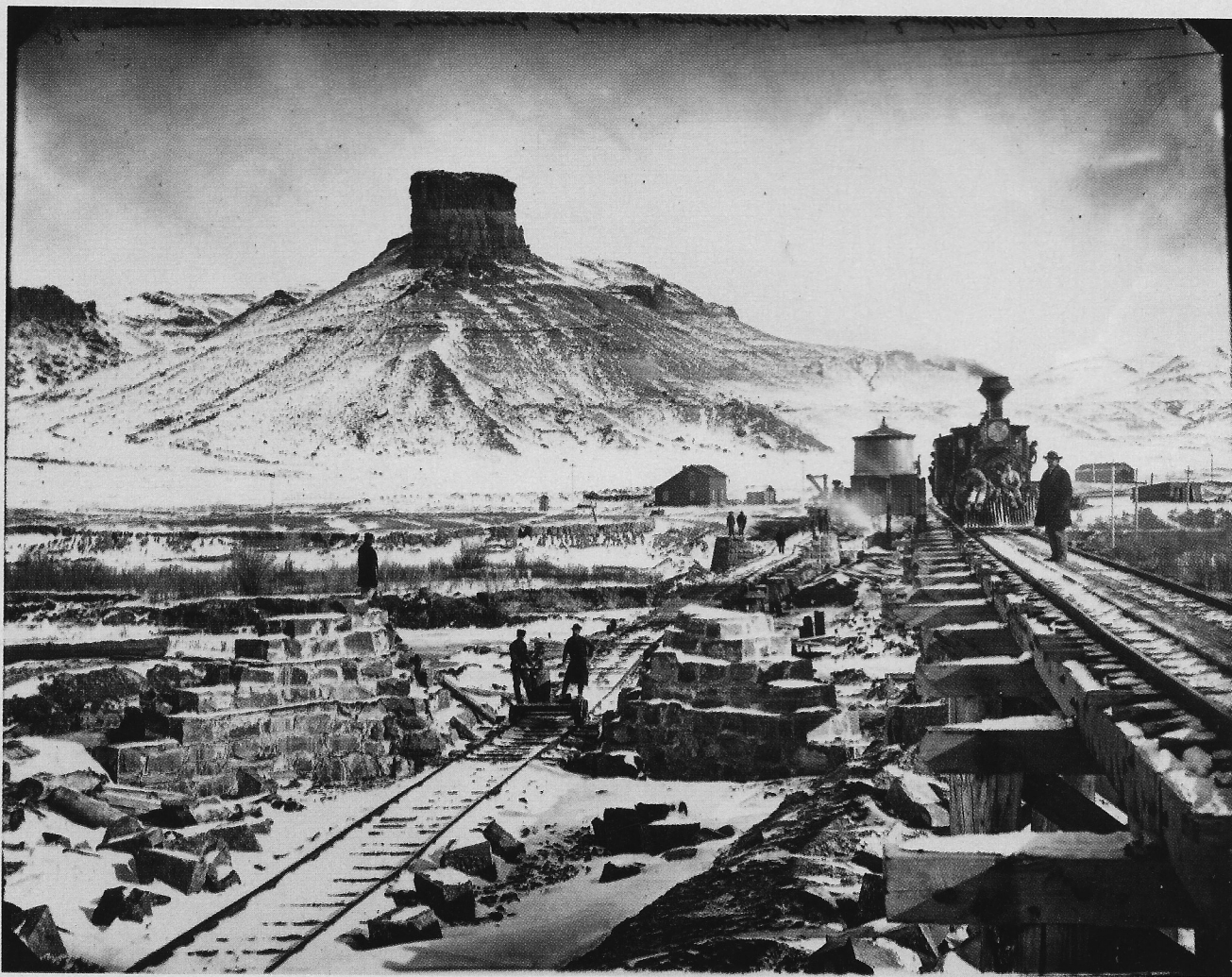
THE PACIFIC RAILROAD

With the Civil War over, the manpower and resources finally became available for nineteenth-century America's single most ambitious industrial challenge—completion of the long-awaited transcontinental railroad. Railroad executives, aware of the value of publicity in attracting settlers to the vast lands the companies would receive for building the road, and mindful that they were embarking on a history-making venture, saw to it that photographers recorded the work.

Outstanding among the railroad photographers was Andrew J. Russell (1830-1902), former official photographer for the construction corps of U.S. military railroads during the Civil War. Hired by Union Pacific vice president Thomas C. Durant in 1868, Russell accompanied the graders, tunnel diggers, and tracklayers as they raced westward through Wyoming toward the Great Basin. Using collodian plates in a 10- by 13-inch camera, Russell photographed laborers and engineers, locomotives and trestles, and the

spectacular and often forbidding landscape through which the newly-laid track passed. When Union Pacific and Central Pacific executives drove the golden spike at Promontory Point, Utah on May 10, 1869, Russell was there to record the moment for history. Two hundred of Russell's original glass plates, preserved in California's Oakland Museum, provide us with some of the finest extant images of Manifest Destiny and the drive westward.

At the Central Pacific end of the project, Sacramento photographer



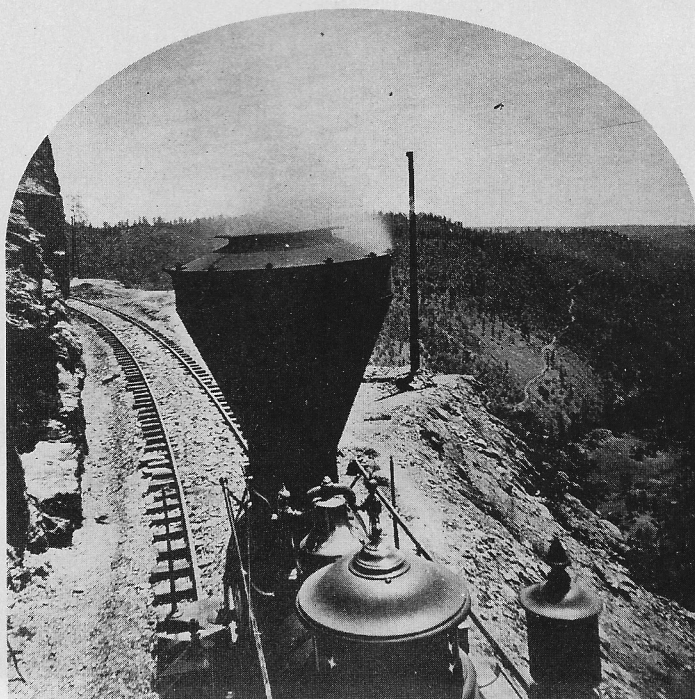
Andrew J. Russell photographed Union Pacific construction at Green River, Wyoming in 1868.



Alfred A. Hart documented Central Pacific construction (above and below).

Alfred A. Hart made hundreds of construction stereographs as that line, carved out by some fifty thousand Chinese laborers, crept painfully over the Sierra Nevada and then sped eastward across the desert toward Promontory Summit.

Later some of America's best scenic photographers served as publicity photographers for railroads. F. Jay Haynes, working out of his special Palace Studio Car, operated for twenty years on the Northern Pacific line. William Henry Jackson, who had also photographed Union Pacific construction in 1869, made many spectacular views of Colorado railroads during the 1880s and '90s. And at the turn of the century Cheyenne photographer J.E. Stimson documented the extensive rebuilding of the by-then deteriorating Union Pacific right-of-way through Wyoming.



EXPANDING VISIONS

Even before photography arrived in America, Samuel F. B. Morse realized that it held great potential for practical and scientific applications. "You perceive how this discovery is, therefore, about to open a new field of research," Morse wrote from Paris in 1839, noting that he had seen a daguerreotype plate picturing the most minute details of a spider. "The naturalist is to have a new kingdom to explore, as much beyond the microscope as the microscope is beyond the human eye."

As early as 1840 John W. Draper of Philadelphia anticipated the use of photography in astronomy when he attempted to make daguerreotypes of the moon. During the 1860s his son, Dr. Henry Draper, produced

spectacular wet plate lunar photographs (above) with a telescope of his own making. John Adams Whipple of Boston conducted similar experiments, producing hundreds of daguerreotype and wet plate views of the sun, moon, major planets, and brighter stars. But the full-flowering of astrophotography had to await the advent of sensitive

Henry Draper photographed the moon (above) in about 1863.

gelatine dry plate negatives in the 1880s.

In 1860 a former Whipple associate—James Wallace Black—pioneered photography *from* the skies, making America's first successful aerial photographs. After initial efforts to photograph Providence, Rhode Island from a balloon, Black exposed the plate reproduced on the opposite page and several others over Boston on October 13, portraying the city, in the words of Oliver Wendell Holmes, "as the eagle and wild goose see it."

Far to the west, survey photographer Timothy O'Sullivan made some of the earliest artificially lighted photographs. Descending into the fabled Comstock Mine at Virginia City, Nevada in July 1867, O'Sullivan risked fire and explosion to obtain wet plate views illuminated by burning magnesium wire (left). Flashlight photography would become more practical two decades later with the advent of magnesium flash powder.

Photography also found application in law enforcement; the view opposite, made at the Denver, Colorado police headquarters, shows the department's rogues' gallery which, when this picture was taken in 1900, numbered some two thousand photographs of criminals and law offenders.



NATIONAL MUSEUM OF AMERICAN HISTORY, SMITHSONIAN INSTITUTION

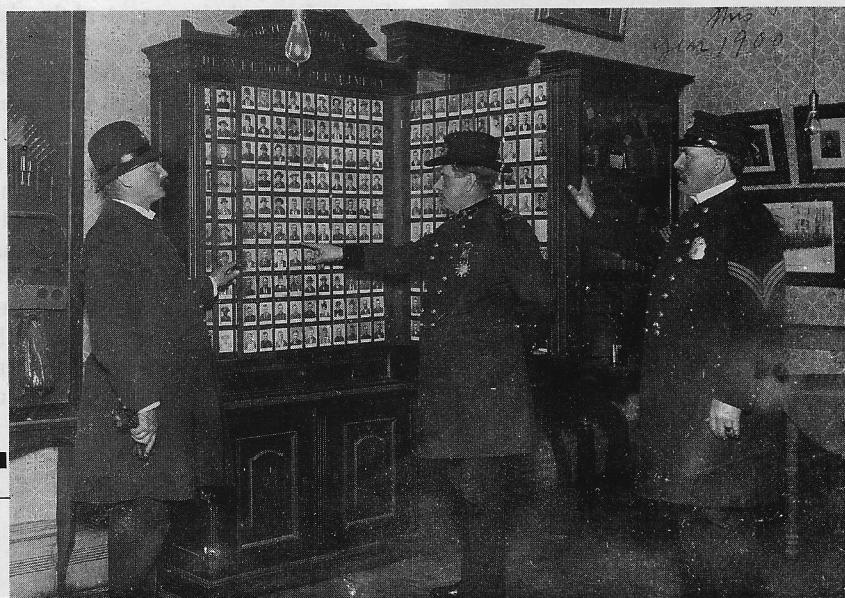


Timothy O'Sullivan pictured a Virginia City mine in 1867.



James Wallace Black photographed Boston from a balloon (left) in 1860, two years after a French photographer achieved the same feat over Paris.

By the turn of the century several U.S. law enforcement agencies, including the Denver, Colorado police department (right), were using files of "mug shots" to track known law offenders.





"Watching the Herd" by
Roland Reed (Piegan,
circa 1912).

THE VANISHING RACE



By the time photography arrived in America in 1839, most native Americans east of the Mississippi River had already been displaced from their ancestral lands, their ancient cultures irretrievably altered or lost. But as the frontier pushed on across the vast expanses of the West during the latter half of the nineteenth century, the camera was there not only to record the Indian as he had existed for hundreds of years but also to document his defeat and near-elimination.

Indians regarded the photographer with awe—and sometimes with pleasure. The official report for an 1853 government railroad survey to

the Pacific Northwest, for example, noted that when expedition artist John Mix Stanley "commenced taking daguerreotypes of the Indians . . . they were delighted and astonished to see their likeness produced by direct action of the sun. They worshiped the sun, and they considered Mr. Stanley was inspired by their divinity, and he thus became in their eyes a great medicine man." Other native Americans, having learned to mistrust the white man in the face of relentless pressures from his advancing civilization, viewed the camera and its magic with suspicion. Nevertheless, dozens of frontier photographers—including Wil-



Opposite page, bottom:
Tosh-a-wah, chief of the
Penateka Comanches, by
William S. Soule (circa
1869-74).

Left: Black Eagle,
Assiniboin warrior, by
Edward S. Curtis (circa
1910).

Below: "The Moose Call"
by Roland Reed (Ojibway,
circa 1910).

KRAMER GALLERY, INC., ST. PAUL, MINNESOTA



liam S. Soule in Oklahoma, L.A. Huffman in the Montana Territory, and Adam Clark Vroman in the Southwest—compiled remarkable records of the western tribes.

As the century neared its end and the Indian's subjugation grew near-complete, the white man's perception of his former adversary changed. Gaining a new respect for traditional Indian values and sensing that all traces of that ancient culture might soon vanish beyond retrieval, some photographers, including Roland Reed and Edward S. Curtis, mounted intensive efforts to record what was left of the Indian's world before it was too late.



GELATINE AND GLASS

Frustrated by the limitations of the collodian process, photographers repeatedly attempted to devise a "dry plate" negative that did not have to be exposed and developed within minutes after sensitization. They achieved little success until 1871, when English physician Richard L. Maddox tried an emulsion consisting of gelatine impregnated with silver-bromide salts. Although initially less sensitive than collodian negatives, the gelatine plates worked. Over the next several years various experimenters in England and the United States modified Maddox's process, and by the early 1880s a number of manufacturers were producing gelatine "dry plates" commercially—including a young Rochester, New York bookkeeper and amateur photographer

Improved technology enabled Arnold Genthe to unobtrusively photograph San Francisco's Chinatown (above).

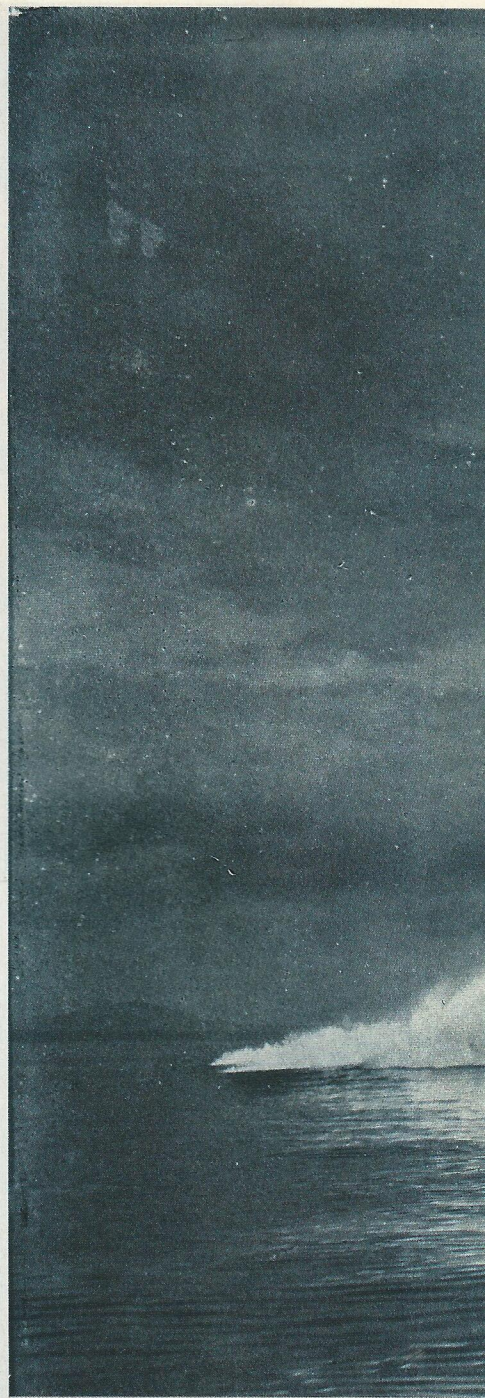
named George Eastman.

Unlike wet plate negatives, gelatine plates could be stored for months before use, and after exposure they could be developed at leisure. Moreover, improvements in dry plate technology made them so sensitive to light that use of hand-held cameras became possible.

Some companies also began to provide developing and printing services, giving birth to the photofinishing industry. With the technical aspects of picture-making vastly simplified, thousands of new amateurs joined the photographic ranks.

The dry plate process changed the way cameramen worked. Commercial photographers, freed from the tyranny of the portable darkroom, ventured into areas and circumstances previously inaccessible. Maritime photographer Enrique Muller, for example, working from the deck of a tugboat, was able to go miles out to sea to photograph the U.S. Navy's new battleship *Connecticut* during her engineering trials

off the Maine coast (above). And amateurs, working with the high-speed plates and hand-held shoebox-sized "detective cameras," began to obtain genuine "candid" views of the world around them. Using such a camera, California photographer Arnold Genthe wandered through the streets of San Francisco's pre-earthquake Chinatown and portrayed the throngs there without arousing the suspicion and ire of his subjects (upper left).





Working with a gelatine dry plate in a large view camera, maritime photographer Enrique Muller made this dramatic view of the battleship "Connecticut" (above) off the Maine coast. Available commercially, dry plates also attracted many amateurs to photography (left).

PORTRAITS OF AN ERA





By the late nineteenth-century, virtually every main street in America had at least one portrait gallery. Although portraiture was the bread-and-butter work that the photographers relied on to pay their bills, many of these men and women also found time and opportunity to compile an informal pictorial record of the people, businesses, and activities that characterized their home regions. Sadly, of the millions of such images they created, only a fraction survive today. Those we do have testify not only of the values that Americans across the country once shared but also to the rich diversity of the American scene.

One perhaps typical small-town photographer was Charles R. Pratsch (1857-1937). Son of a hotel owner in the Grays Harbor area of western Washington, Pratsch paid

three hundred dollars to a professional photographer in 1885-86 to learn the craft, then established his own studio in Aberdeen, a major lumber mill and shipbuilding center. His surviving glass plate negatives, preserved at Washington State University, are among the best extant pictorial records of pioneer life in this roughhewn wilderness region of homesteaders, loggers, mill hands, and sailors.

Another regional photographer was George Edward Anderson (1860-1928). A former apprentice to well-known Mormon photographer Charles R. Savage, Anderson set up his first studio in Salt Lake City at age seventeen. For the next half-century, sometimes maintaining a studio in Springville and at other times working as a traveling photographer, Anderson pictured the peo-

Charles R. Pratsch photographed an Aberdeen, Washington bucking competition (opposite); George Edward Anderson pictured the Utah pioneers (above).

ple and activities of Utah as well as scenes relating to the history of the Mormon church. Unfortunately, Anderson was a far better cameraman than businessman, and his recurrent financial straits estranged him from his more practical wife. "Like other photographers and artists around the turn of the century," notes his biographer Rell G. Francis, "Anderson felt a compulsion to record his times. This he accomplished. Surely George Edward Anderson will be remembered as the village photographer who was in the business for the love of art, history, and his religion."

TIME AND MOTION

Coleman Sellers (below) poses with his "kinematoscope," a stereo viewer the Philadelphian devised to create the visual illusion of motion.

As early as 1824 European scientists were investigating the optical characteristics of objects in motion. By mid-century several popular parlor toys created primitive animation using mirrors, slotted discs or rotating cylinders, and sequential drawings of human figures and animals.

The earliest known precursor to the motion picture that actually used photography was a device created by Coleman Sellers (1827-1907), a mechanical engineer and instructor at the Franklin Institute School in Philadelphia. In about 1860 Sellers made several stereographic photo sequences. One sequence showed his wife fanning herself and another pictured his two sons rocking in a chair and hammering a nail. Sellers attached the stereo cards to a paddle-wheel mechanism in a viewer he called a "kinematoscope" (near right). When the observer rotated the wheel with a

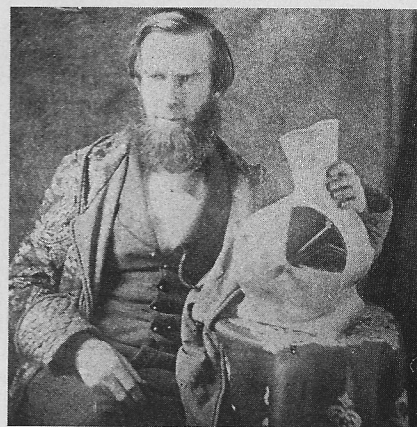
Using banks of cameras, Eadweard Muybridge made thousands of photographs of animals and people in motion; the sequence below shows the photographer himself walking up and down an inclined plane.

knob, the sequence realistically recreated the illusion of motion—and in three dimensions! The inventor did not follow up on his opportunity; having satisfied his curiosity, he moved on to other fields.

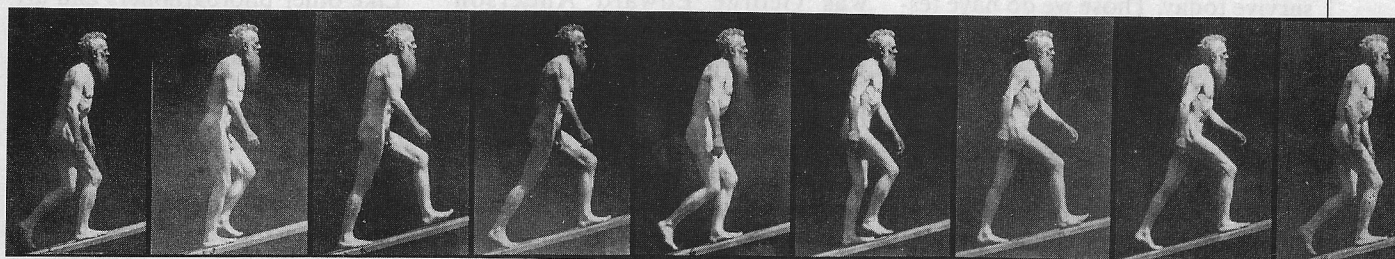
The most celebrated experiments involving photography and motion were those by Eadweard Muybridge (1830-1904), a California photographer engaged by railroad magnate Leland Stanford to investigate the gaits of a horse. The actions of a trotting or galloping horse had long been the source of controversy as well as the bane of painters, because the motion of the fast-moving animal's legs was too rapid for the human eye and brain to comprehend. Muybridge's initial attempts to photograph horses in 1872 were followed by more sophisticated experiments five years later; finally a sequence of exposures, in which a galloping horse broke threads to trip high-speed shutters on twelve cameras, proved conclusively that all four of the horse's hooves leave the ground. Thus inspired, Muybridge made and published hundreds of photographic sequences of animals and humans in action. In 1880 he also succeeded in projecting motion picture sequences on a screen using a special magic lantern he called the "zoopraxiscope."

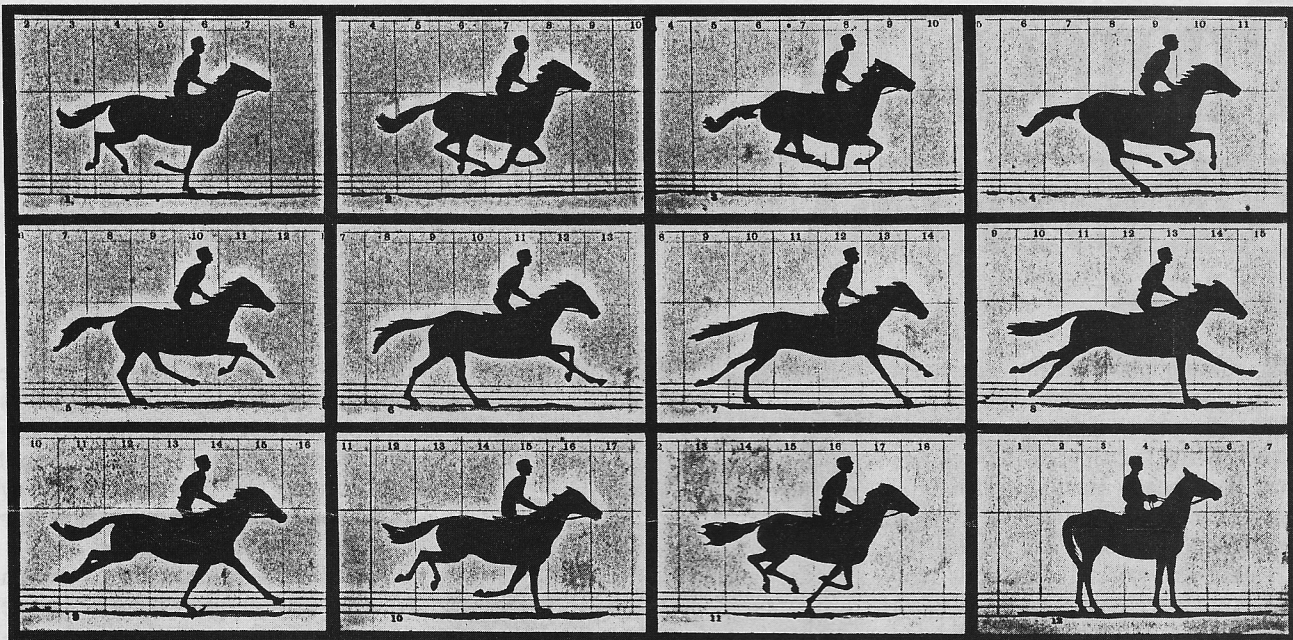
Muybridge's experiments encouraged Pennsylvania artist Thomas

Eakins (1844-1916) to undertake similar studies. While Muybridge's sequences utilized a series of cameras taking individual exposures, Eakins used a single camera with a rotating disc in place of the shutter. Repeatedly passing across the lens, an opening in the disc registered successive images on a single negative.

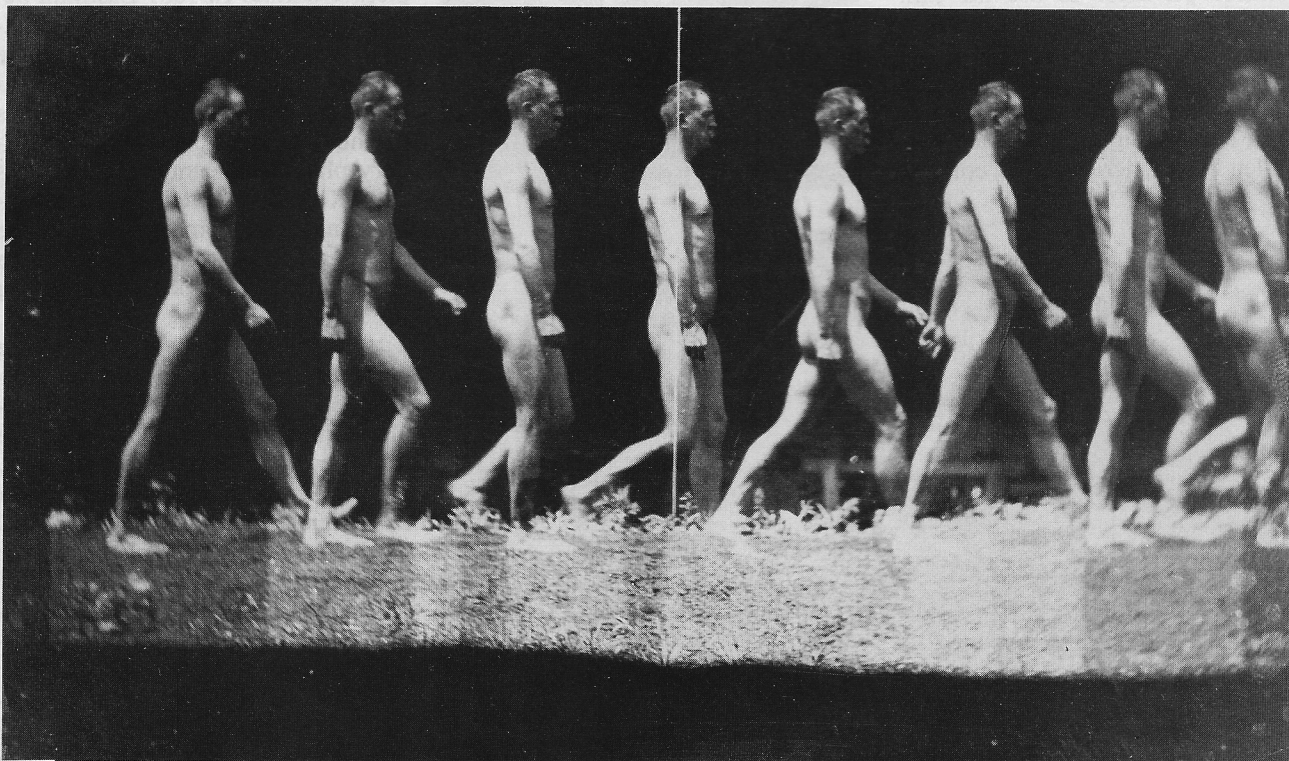


Muybridge's work came to the attention of Thomas Edison, who used some of what he learned from those experiments in designing his kinetoscope (a peep-show type of viewer using sprocketed strip film produced by George Eastman) in 1891. That invention, followed by French inventors Louis and August Lumière's cinématographe (a projector) in 1895, finally helped to open the door to practical commercial motion pictures.

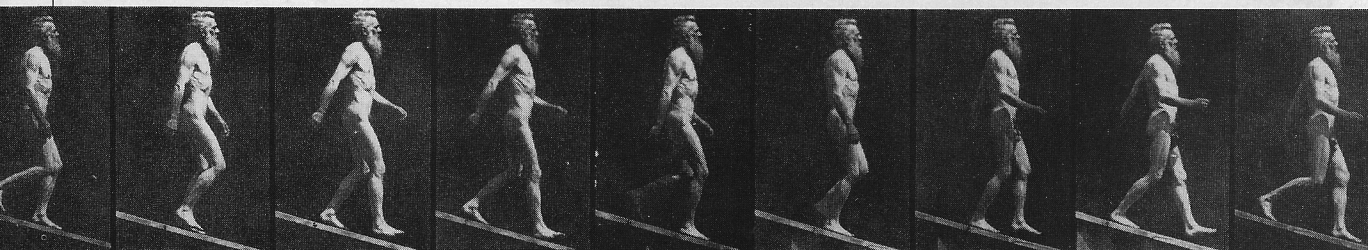




With rows of cameras and high-speed exposures, Eadweard Muybridge obtained the first photos showing a horse's gait.



Thomas Eakins studied human motion using a single camera with a rotating shield in front of the lens.



PHOTOGRAPHY FOR EVERYMAN

A amateur photography entered a new epoch in the summer of 1888, when workers at George Eastman's little factory in Rochester, New York began turning out a simple but revolutionary instrument called the "Kodak." A hand-held box camera with a fixed-focus lens and single-speed shutter, the Kodak embodied a totally fresh concept. The twenty-five-dollar camera came factory loaded with "film" for one hundred pictures. To use the camera, the photographer simply pointed it toward the subject and tripped the shutter, then advanced the film and reset the mechanism. After completing the roll, the owner mailed the camera and its contents



back to Eastman's factory, where technicians developed the negatives and printed the circular images (opposite and below). For an additional ten dollars the Eastman factory reloaded the camera with film for another hundred exposures.

Eastman's remarkable camera was the product of nearly a decade of methodical research and invention as the visionary entrepreneur pursued his quest to simplify picture-taking. In 1881 Eastman began manufacturing dry plate negatives to his own formula. By 1885 he was marketing rolls of sensitized paper that, mounted in an ingenious roll holder, could be used in an ordinary plate-back camera. Eastman's 1888 Kodak featured a further significant development: a gelatine negative bonded to a paper roll base that could be stripped away during processing.

"Anybody can use it," noted the inventor of his easy-to-operate camera: "Everybody will use it." Eastman's statement was prophetic. The Kodak was an immediate sensation, bringing photography within reach of legions of new enthusiasts and vastly expanding the photographic industry.

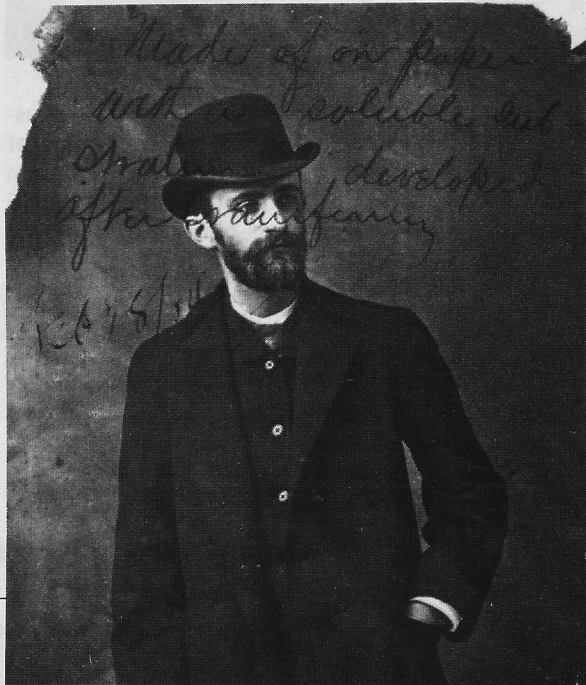
Eastman soon introduced dozens of additional innovations—including transparent celluloid film in 1889, the compact "Pocket Kodak" in 1895, and the enormously popular one-dollar "Brownie" in 1900. More than a century later, billions of photographs taken annually by hundreds of millions of amateurs testify to the timeless value of George Eastman's credo: "You press the button, we do the rest."

The Kodak box camera (above left) reduced photography to its basic elements.



George Eastman's flexible gelatine film (below) greatly simplified photography during the 1880s.

The first Kodaks produced circular images (above and opposite). Rectangular and square prints (below) followed.



EASTMAN KODAK COMPANY

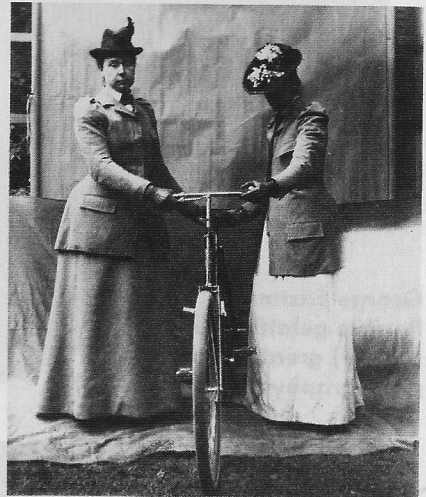
NATIONAL MUSEUM OF AMERICAN HISTORY, SMITHSONIAN INSTITUTION

COLLECTION OF ED HOLM

TALENTED AMATEURS

The great technological advances of the 1880s demystified and simplified photography, bringing excellence in picture-making within reach of thousands of amateurs. The most talented of these enthusiasts, often documenting aspects of society overlooked by professional photographers, created bodies of work that today rank among the finest pictorial records of nineteenth- and early twentieth-century American life.

One such exceptional amateur was Elizabeth Alice Austen (1866-1952), member of a well-to-do fam-



BOTH: ALICE AUSTIN COLLECTION, STATEN ISLAND HISTORICAL SOCIETY

ily in Staten Island, New York. Austen, who had learned the basics of photography at the age of ten from a sea-captain uncle, made seven thousand glass-plate images of her family, friends, and Staten Island society over a forty-year period between the 1870s and 1920s.

Austen never married, and she was eventually reduced to poverty

Alice Austen
photographed the good life in
Staten Island, New York.



BOTH: CULVER PICTURES, NEW YORK CITY

by the stock market crash. In 1950 the by-then infirm woman was rescued from the poorhouse when, through the efforts of interested friends, enough funds were raised through publication of her long-forgotten pictures to provide private care. Her unique pictorial record of a quieter and perhaps happier era is preserved in the archives of the Staten Island Historical Society.

At about the same time that Austen was photographing lawn-tennis parties and bicycle outings, Chansonetta Stanley Emmons (1858-1937) was picturing rural activities in northern New England. Using dry-plate negatives made by her twin brothers—inventors of the Stanley Steamer automobile—Emmons spent the summers photographing family and neighbors in her childhood hometown of Kingfield, Maine. Her sentimental views of one-room schoolhouses, horse-drawn hay wagons, children rolling barrel hoops, and white-bearded patriarchs shucking corn are unexcelled for their sympathetic depictions of American country life.



**New England
photographer Chansonetta
Stanley Emmons
documented
turn-of-the-century rural
life in her childhood
hometown of Kingfield,
Maine (above).**



ARTISTIC VISION— AND AN ARTISTIC VISIONARY

The first photographs were admired because they mirrored reality. The camera's ability to faithfully re-create the scene before it exceeded that of any other medium.

But by its very nature, photography also invited comparisons with other types of pictorial representation. Photography was clearly a vehicle of communication; but could it also be a valid means of self-expression? Was photography a legitimate art form? And if photography was art, should it emulate other mediums of artistic expression?

Almost from the beginning, some photographers were asking and attempting to answer such questions. As early as mid-century a few (particularly in England) were consciously imitating various styles of paintings, including genre and allegorical scenes.

During the 1880s and '90s interest in the aesthetic aspects of photogra-

phy intensified as technical advancements simplified picture-making, giving more amateurs access to the medium and freeing them to devote attention to such elements as pictorial composition. Artistically inclined enthusiasts formed groups—including the Linked Ring in London and the Camera Club in New York—and held shows. But photography still lacked widespread recognition as a valid art form.

Then an intense, articulate, Hoboken-born photographer named Alfred Stieglitz (1864-1946) stepped onto the scene and almost singlehandedly transformed pictorial photography and the world's perception of it. Although Stieglitz merits recognition as one of the finest artistic photographers of his day, his greater significance from 1900 until his death nearly half a century later was as a critic and spokesman. In 1902, at odds with the Camera Club and the status of pictorial photography in America, Stieglitz created the Photo-Secession, an informal group of leading amateurs, "to hold together those Americans devoted to pictorial photography [and] exhibit the best that has been accomplished by its members or other photographers and above all to dignify that profession until recently looked upon as a trade." As editor of *Camera Work*—probably the finest photographic magazine ever published—and as proprietor of a gallery at 291 Fifth Avenue in New York, Stieglitz became the most influential force in American photography and earned for it unchallenged status as a unique and respected art form.



Images from Alfred Stieglitz's Photo-Secession group: "The Flatiron" by Edward Steichen (opposite); "The Ring Toss" by Clarence H. White (left); and "Blessed Art Thou Among Women" by Gertrude Käsebier (above).

AN AWAKENING SOCIAL CONSCIENCE

A destitute immigrant who struggled for survival on the streets of New York City following his arrival from Denmark in 1870, Jacob A. Riis (1849-1914) was well acquainted with the terrible poverty and suffering that pervaded the city's tenements, seven-cent lodging houses, and sweatshops. Later, as a police reporter for the *New York Tribune* and *Evening Sun* during 1877-99, Riis again found himself thrown into contact with the darker side of New York life. Rebelling against the inhumanity he witnessed in the slums, Riis evolved into a muckraking journalist and social reformer, recording what he saw in impassioned words and stark photographs. In addition to writing hundreds of newspaper and magazine

articles describing the plight of New York's poor, Riis gave lectures illustrated with lantern slides from his photographs, and authored more than a dozen books. His *How the Other Half Lives* (1890) was among the first books ever to include a number of halftone illustrations. To picture the abhorrent conditions in crowded tenement rooms and transient lodgings, the self-taught photographer pioneered the use of flash photography, repeatedly risking injury and blindness from the magnesium flash powder he ignited in a frying pan. Among those influenced by Riis's reports and pictures was New York police board commissioner Theodore Roosevelt; the subsequent association between the two led to numerous social reforms.

Similarly involved in using photography to correct social injustices was Lewis W. Hine (1874-1940). Hine learned photography while teaching school in New York, and his first important pictures documented the tribulations of immigrants at Ellis Island in 1905. Many of Hine's most powerful images date from his years as an investigator for the National Child Labor Committee during 1908-1916, when he graphically depicted the exploitation of children in factories.

Paving the way for later reformers, Riis and Hine demonstrated that the camera is not only a useful tool for recording social ills but that its images can wield great moral power in helping to correct them.

Pioneering photojournalist Jacob A. Riis's picture of an Italian rag picker in her Jersey Street lodgings (right) was one of hundreds of such views he made in an effort to draw public attention to the plight of New York City's poor. Immigrants on Ellis Island (opposite) were an early subject for Lewis W. Hine; later he documented the exploitation of children in many of the nation's factories.



JACOB RIIS COLLECTION, MUSEUM OF THE CITY OF NEW YORK



ture of disdain and puzzlement. But most of the younger residents, who know Steinbeck only through his books, regard him with unabashed affection.

Fifty years after *The Grapes of Wrath* first appeared in American bookstores, Steinbeck holds the loyalty of an ever-growing number of readers, both young and old. In "Steinbeck Country," as elsewhere, succeeding generations find renewed inspiration in the novelist's finest works—*The Pastures of Heaven* (1932), *The Red Pony* (1933), *Tortilla Flat* (1935), *Of Mice and Men* (1937), *The Long Valley* (1935), *The Grapes of Wrath* (1939), *Cannery Row* (1945), *The Pearl* (1947), and *East of Eden* (1952)—works that reaffirm Steinbeck's enduring theme: "man's proven capacity for greatness of heart and spirit."

A visit to "Steinbeck Country" today can reacquaint old Steinbeck admirers with the writer—and introduce new readers to his books.

Such a visit should begin in Salinas, off U.S. Highway 101 about one hundred miles south of San Francisco. The house at 132 Central Avenue near the center of town in which Steinbeck was born still stands. Built in 1897, it is a comfortable story-and-a-half Victorian with gingerbread gables, carved brackets, and a graceful Queen Anne tower overlooking a neat garden of green lawns and colorful flowers. Acquired by the non-profit Valley Guild of Salinas in the early 1970s, the Steinbeck House has been restored to its turn-of-the-century appearance. Lunch is served every weekday in the parlor, while books by and about Steinbeck and Salinas are available in the Best Cellar Gift Shop in the basement. Restaurant reservations are required; the gift shop is open to the public Monday through Friday from 11 A.M. to 3 P.M.

Four blocks from the Steinbeck House, at 110 West San Luis Street, a life-sized bronze statue of the writer stands guard over the entrance to the Salinas public library, in 1969 renamed the John Steinbeck Library. This institution boasts one of the country's largest collections of Steinbeck manuscripts, photo-

graphs, tape recordings, and first editions. The Steinbeck Archives are available for scholarly use by appointment only; the John Steinbeck Room, displaying a rich array of photographs, posters, newspaper clippings, and manuscripts, is open to the public daily. The library sells a good selection of books and pamphlets by and about Steinbeck, including a paperback *Guide to Steinbeck Country* with maps keyed to the writer's major works.

**Steinbeck would
no doubt decry
commercialization
of the region—
but might laugh
at the irony
that he is
responsible for
much of the fuss.**

Each year in midsummer, the Steinbeck Library hosts the "Steinbeck Festival"—where Steinbeck friends, admirers, and scholars gather for lectures, round-table discussions, and showings of popular Steinbeck films such as *East of Eden*, filmed in Salinas in 1954. Festival events are held in the library and Salinas Community Center.

Any visit to "Steinbeck Country" must include stops in Monterey and Pacific Grove, about eighteen miles west of Salinas on State Highway 68. Steinbeck spent most of his summers in Pacific Grove when he was a boy, and as a young man he haunted the six-block-long stretch of waterfront between Pacific Grove and Monterey called Cannery Row. Although the sardine canneries that crowded Cannery Row from the 1920s through the 1940s have long since ceased operation, much of the street is revitalized—now crowded with a bewildering array of hotels, restaurants, gift shops, and art galleries. A few of the old cannery buildings have been converted to modern uses, and new structures

have been added. But some of the places memorialized in *Cannery Row* and its sequel, *Sweet Thursday* (1954), survive. The weathered wooden building at 800 Cannery Row that once housed the Pacific Biological Laboratories (home and office of the memorable "Doc" Ed Ricketts) is now a private men's club. Lee Chong's General Store at 835 Cannery Row offers a variety of local wares—clothing, jewelry, pottery, glassware, and paintings. Behind the main showroom is a smaller room filled with Steinbeck memorabilia—posters, photographs, old newspaper clippings, magazines, and books. The huge new Monterey Bay Aquarium, opened in 1985 just a few doors from "Doc's" lab, is one of the region's major tourist attractions; another popular stop-off is a bronze bust of Steinbeck that stands in front of a parking lot near Cannery Row's intersection with Prescott Street.

"Steinbeck Country" has changed dramatically since the writer left it in the late 1940s (he spent the last twenty years of his life in and around New York City). The once-quiet town of Salinas is now a busy city of more than one hundred thousand, and Cannery Row, once the home of bustling armies of fishermen and cannery workers, is now crowded with tourists. An intensely private man for all his celebrity, Steinbeck would no doubt decry all the commercialization. But he might laugh when reflecting on the irony that he himself was responsible for most of the fuss. If he had not written so convincingly about the hills and valleys and towns of the central California coast—if he had not created characters who seized the imagination and stirred the heart as memorably as "Doc" of *Cannery Row*, Cal and Aron Trask of *East of Eden*, "Ma" and "Pa" Joad of *The Grapes of Wrath*, and George and Lennie of *Of Mice and Men*, the region would be a little less crowded than it is—and the pages of American literature would be infinitely less enriching. ★

Brian McGinty is a frequent contributor to American History Illustrated. Before moving to the San Francisco Bay area, he lived in the heart of "Steinbeck Country" for more than fifteen years.

Classified Advertising

ANTIQUE STOCK CERTIFICATES

HISTORIC AMERICAN STOCKS & BONDS. Genuine "Special-Event" Civil War Newspapers. Old State, U.S., & World Maps. Information and price list: **KICC-AHI, P.O. Box 5001, Sonora, CA 95370. (209) 533-1306.**

ARTHRITIS

ARTHRITIS PAIN RELIEF! Simple inexpensive natural formula. Prepare this patent pending treatment at home. For instruction Booklet with formula, send \$14.95 to: **Painfree Holdings, Inc., Dept. 1-L, P.O. Box 202, Lake Geneva, WI 53147.**

BOOKS/DOCUMENTS

THE MILITARY BOOKMAN — Military, Naval and Aviation history — Out-of-Print & Rare Books, 29 East 93rd Street, New York, New York 10128. (212) 348-1280. Tuesday through Saturday, 10:30-5:30. Catalog subscriptions available.

PRESIDENTIAL BIOGRAPHIES — send 25¢ stamp for monthly listing of available titles. **American Political Biography, 39 Boggs Hill Road, Newtown, CT 06470.**

NORTHEAST LIGHTS by Robert G. Bachand. Lighthouses, lightships & their keepers, RI to Cape May, NJ. 422 p, 153 photos. Hard cover. \$19.95 + shp \$2.00
SEA SPORTS PUBL. Box 647, Dept A
Norwalk, CT 06854 (203) 866-5376

INDIAN WARS/CIVIL WAR. Out-of-print and Rare Books. Catalogs Free. Buying Also. **Wallace Pratt, 1801 Gough St., San Francisco, CA 94109.**

BOOKS/DOCUMENTS

HISTORY OF NORWICH (CT). F.M. Caulkins' 1866 revision with 1976 index available at \$37.95 + \$2.00 p&h. (CT residents include \$2.85 tax.) Order from **Books, Etc., 210 W. Town Street, Norwich, CT 06360.**

US PRESIDENTS/CIVIL WAR/LINCOLNIANA — Autographs; Out-of-Print, Rare, & In-Print Books: Bought & Sold (Collections Sought). Catalogs Issued. **Abraham Lincoln Book Shop, 18 East Chestnut Street, Chicago, IL 60611. (312) 944-3085.**

ALDOLF HITLER AND THE HOLY LANCE by Col. H. Buechner — Hitler's fascination with the power of the lance which pierced the side of Christ. Mysterious rituals of the S.S. secret U-boat voyages to Antarctica. 225 p., 34 illustrations \$15.95 postpaid. **Thunderbird Press, 300 Cuddihy Drive, Dept. AHI, Metairie, LA 70005.**

NAVAL-MILITARY AVIATION. Mostly second-hand. Some new. Send \$1.00 for descriptive 48-page catalog containing approximately 1500 offerings. **Antheil Book-sellers, 2177AHI Isabelle Court, No. Bellmore, NY 11710.**

PIONEER PHOTOGRAPHER, Wisconsin's H.H. Bennett. 192 pages, soft cover. Includes 60 famous photos from his glass plate negatives. \$15.95 includes postage. **Heart Prairie Press, Box 332, Whitewater, WI 53190.** Specify "Bennett book".

BOOKS ON HISTORY, Genealogy, and early American life. **FREE CATALOG! HERITAGE BOOKS, INC., 1540E Pointer Ridge Place, Suite 208, Bowie Maryland 20716.**

BOOKS/DOCUMENTS

PERSONAL MEMOIRS OF U.S. GRANT. Hardcover, illustrated, 648 pages. Send \$18.95 + \$2.50 pstg/hdlg to: **L & L Trading Company, Dept. A, P.O. Box 315, Mercersburg, PA 17236.**

AVIATION BUFFS ... I buy and sell rare and collectible aviation books; send for current list to: **STI-AHI, P.O. Box 173, Winnetka, IL 60093.**

CLOTHING



Alice's country cottage
Jefferson Shirt
100% cotton, with homespun look, wooden buttons and dropped shoulder seams, natural color. Period design. XS to XXL. \$24.95 ppd. Wholesale orders welcome. Visit my shop in Harpers Ferry W. VA 1-800-288-7977. Visa/MC.
ALICE'S COUNTRY COTTAGE
Box AH, Rohrsville, MD 21779

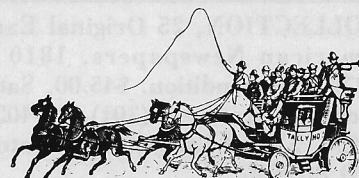
Specify Men or Women

COLLECTIBLES

REMINGTON BRONZES. Full size solid bronze recasts of Remington's famous sculptures. \$595.00 AmEx/Visa/MC. **Foundry Bronzes, 1933 S. Broadway, Suite 1008, Los Angeles, CA 90007. (213) 748-3546.**

COMPUTER SOFTWARE

IBM-PC. FIFTY STATES QUIZLER. Over 1000 multiple choice questions! Categories include famous places, bodies of water, state induction dates. Satisfaction Guaranteed. Specify diskette size. \$9.95. **Lawrence Truett, AHI2, 432 Bigelow Hollow, Woodstock Valley, CT 06282.**



FLAGS

FLAGS FLAGS FLAGS — ALL STATES, COUNTRIES, RELIGIONS, HISTORICAL, HOLIDAYS, FLAGPOLES. Catalog \$2.00. American Flag & Gift, 737A Manuela Way, Arroyo Grande, CA 93420. (800) 448-FLAG, (805) 473-0395.

GENEALOGY

GENEALOGIES. Over 3,500 scarce American Genealogies For Sale. Catalog #8 is \$3.00. Higginson Books, 14H Derby Square, Salem, MA 01970.

SONS OF THE AMERICAN REVOLUTION, 100th Anniversary 1889-1989, Hyatt-on-Union Square, San Francisco, CA, June 30-July 5, 1989. P.O. Box 1776, San Diego, CA 92112-1776.

FAMILY TREE: For free information about professional service implementing census, probate, land, LDS, etc. records, (508) 664-4149. (No Sunday calls). DAVID HONAKER, 23 Lindor Road, North Reading, MA 01864.

HELP WANTED

EASY WORK! EXCELLENT PAY! Assemble products at home. Call for information. (504) 641-8003 Ext. 2605.

HERALDRY

COAT OF ARMS. 500,000 NAMES, 32 COUNTRIES. FREE CATALOG. Our 20th year. The Ship's Chandler, Dept. AHI, Wilmington, VT 05363.

HISTORIC NEWSPAPERS

COLLECTION, 25 Original Early American Newspapers, 1810 to 1879, fine condition. \$45.00. Satisfaction guaranteed. (301) 949-4029. MCA, 11910 Lafayette, Wheaton, MD 20902.

INVENTIONS

A NEW IDEA? Call National Idea Center of Washington D.C. Free info - 1-800-247-6600 Ext. 121. Come see The Invention Store!!

OLD MAPS

STATE, RAILROAD, COUNTY and CIVIL WAR MAPS. 70-120 years old. All States. Send \$1.00 for catalog. Northern Map, Dept. AH, Dunnellon, FL 32630.

OLDTIME RADIO

CLASSIC BROADCASTS from America's golden age of radio, on high quality tapes. Music! Comedy! Mysteries! Westerns! Free catalog. Carl Froelich, 2-N Heritage Farm, New Freedom, Pennsylvania 17349.

ORGANIZATIONS

LEARN ABOUT THE EXPEDITION in study and travel. Dues only \$15.00 annually. Join the LEWIS & CLARK TRAIL HERITAGE FOUNDATION, INC., P.O. BOX 3434, GREAT FALLS, MT 59403.

PHOTOGRAPHIC REPRODUCTION

PRESERVE YOUR HISTORY. Museum quality photographic prints made from your Images or Negatives; Archival Specialization. J/S, Route 1, Crawford, TN 38554. (615) 445-3328.

PHOTO RESTORATION BY C. K. CARTER. We use the latest computer technology to make corrected copies of your antique photographs. For information on our competitive pricing & mailing instructions call: 1-800-447-8289 or 919-355-5935, or write: P.O. Box 8007, Greenville, NC 27835-8007.

PORTRAITS

DELUXE OIL PORTRAITS & figure paintings by master artist from any photo. \$35.00. Free print, information write: Boone-AH, 32-26 102nd Street, Flushing, NY 11369.

SEARCH SERVICE

FREE
SEARCH SERVICE
FOR OUT OF PRINT
BOOKS You name it... we find it!
International Bookfinders, Inc.
P.O. Box 1- Y Pacific Palisades, CA 90272

WE FIND OUT OF PRINT BOOKS. Send self-addressed stamped envelope for details. Significant Books, P.O. Box 9248, Cincinnati, OH 45209.

VIDEOS

NEW RELEASE. THE MODERN PRESIDENCY — David Frost's legendary interviews with Presidents Nixon, Ford, Carter and Reagan compiled as a retrospective of the last four administrations. This five-part series is now available on videocassette exclusively from Enterprise Media. For information call 1-800-423-6021, or in MA, (617) 482-5001. Enterprise Media, Inc., 374 Congress Street, Boston, MA 02210.

WANTED

BASEBALL, SPORTS MEMORABILIA, CARDS, POLITICAL PINS, RIBBONS, BANNERS, AUTOGRAPHS, STOCKS & BONDS WANTED. High Prices Paid. Paul Longo, Box 490-LH, South Orleans, MA 02662.

AMERICAN HISTORY CLASSIFIED ADVERTISING RATES

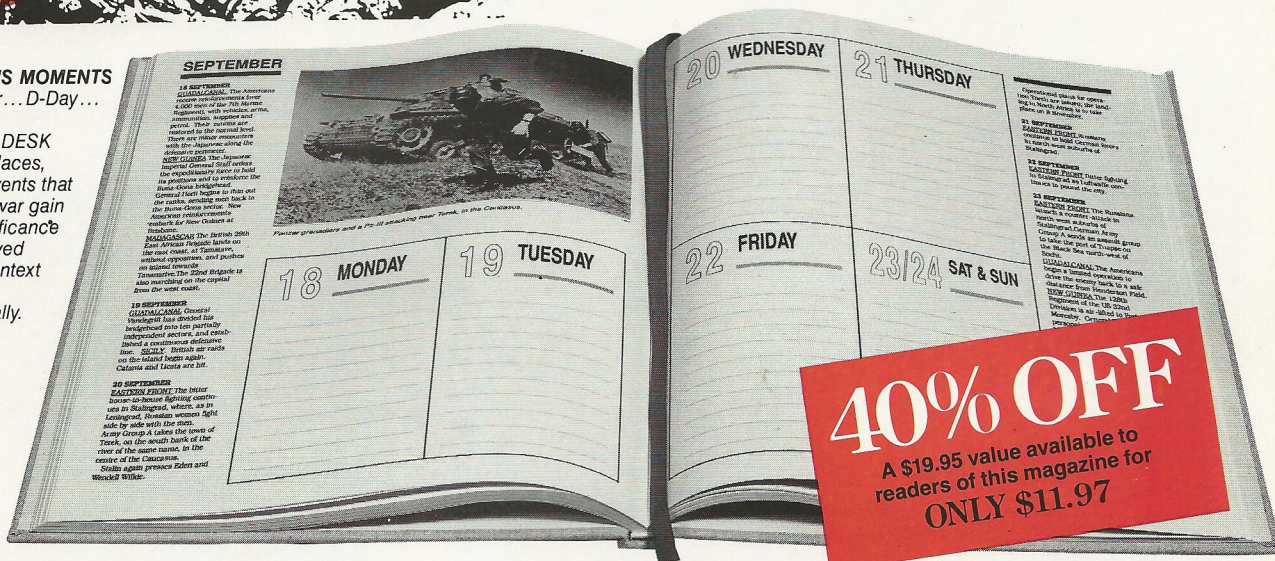
20 word minimum; \$2.90 per word for one insertion; \$2.65 per word for any ad that runs unchanged in three consecutive issues; \$2.35 per word for any ad that runs unchanged in six consecutive issues; \$1.90 per word for any ad that runs unchanged in twelve consecutive issues. Full payment required in advance to qualify for frequency discount. (Frequency rebate offered for separately paid ads when third, sixth and twelfth insertions are submitted). Payment must accompany order. Deadline for advertisements is ten weeks before cover date. Submit copy, heading and payment to: Diane C. Myers, AHI Classified Advertising Department, 2245 Kohn Road, P.O. Box 8200, Harrisburg, PA 17105-8200. For more information, call Diane Myers at (717) 657-9555.

Keep your appointments with destiny
in *World War II Magazine's*
NEW fact-filled, picture-packed...

WWII Day By Day Desk Diary

MOMENTOUS MOMENTS Pearl Harbor...D-Day...

Hiroshima—
In *THE WWII DESK DIARY* the places, dates and events that shaped the war gain greater significance when observed within the context of history—chronologically.



Enter your name in the annals of history's most epic conflict!

In the new *WWII DAY BY DAY DESK DIARY*, you'll not only record personal notes, appointments, and dates to remember...

You'll experience World War II in a uniquely revealing way: *Chronologically*. For this desk diary reads like a combat journal, delivering blow-by-blow, photo-illustrated accounts of each moment of the war, right beside your own daily entries. So you'll see how one action, like the Japanese sneak attack on Pearl Harbor, led to consequent actions, such as the bombing of Tokyo, under the command of Lt. Col. "Jimmy" Doolittle.

Altogether, you've got a diary that helps put your year in order, and puts the war in eye-opening perspective, as well!

Take *THE 1990 WWII DAY BY DAY DESK DIARY*, FREE for 15 Days!

Begin your forays into World War II with *THE 1990 DESK DIARY*. Covering the first 487 days of the conflict, the war chronicles begin on September 1, 1939 (the German invasion of Poland), and continue throughout 1940. So day by day, you'll see the conflict unfold: The Battle of Dunkirk, Italy's entry into the war, the Battle of Britain, and more.

If, after examining *THE 1990 DESK DIARY*

for 15 days, you're not entirely satisfied, return it. However, if you keep it, it's yours for only \$11.97. That's a big first-year, 40% saving off the regular \$19.95 diary price—plus postage and handling.* Then, annually, you'll receive a new *DESK DIARY* that begins where the previous one left off. It's yours under the same trial conditions, at the regular diary price, plus postage and handling.* Keep or return it, as you choose. There's no obligation to buy a thing.

Features of the *WWII DESK DIARY*:

- **40% Discount.** Examine the 1990 *DESK DIARY* for 15 days, Free. As a reader of this magazine, you may keep it, if you choose, for only \$11.97. That's a first-year 40% saving off the regular price of this annual diary.
- **Quality Craftsmanship.** This big 8 1/2" x 11" hard-cover volume has handsome tan buckram covers, gold-foil title printing, a page-marker ribbon, and plenty of space for appointments, birthdays, personal reminders, and more.
- **4-Month FREE Bonus.** The 1990 *DESK DIARY* provides four extra months of personal entries, starting September 1, 1989, and continuing on throughout 1990.
- **Rare WWII Photos...** plus incisive coverage of the leaders, operations, actions and events... reveal the true drama of this epic conflict each time you open the *DESK DIARY*.

Send for your Free-Trial copy of *THE 1990 WWII DAY BY DAY DESK DIARY*. Remember, its personal entries begin on September 1, 1989. So order now to get the most use out of it.

*PA and NY residents must add sales tax.

Available for the first time, only by mail, from:
The National Historical Society • P.O. Box 987 •
Hicksville, New York 11802

40% SAVINGS CERTIFICATE

Mail to: **The National Historical Society**
P.O. Box 987 • Hicksville, NY 11802

☐ **YES.** Please send me *World War II Magazine's 1990 WWII DAY BY DAY DESK DIARY*—FREE for 15 days, under the terms of the ad. I understand that I am entitled to 40% SAVINGS on *THE 1990 DESK DIARY*, if I choose to keep it.

Name _____

Address _____

City _____

State _____ Zip _____

44016 5626

Mail today • Send no money now

Please allow 6-8 weeks for delivery of the first volume

